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ABSTRACT

This compilation, the seventh in an annual series, includes abstracts of 155 studies in agricultural education completed during the period July 1, 1981, to June 30, 1982. Twenty-five of the completed studies represent staff research, 84 represent master's studies or theses, and 46 are doctoral dissertations. Also included is a listing of the 175 studies reported as in progress for the 1982-1983 year. Studies are arranged alphabetically by state and by author within states. A subject index is also included. Topics covered by the abstracts include the following: adult education, agricultural careers, agricultural mechanics, career development, computers/computer assisted instruction, cooperation, cooperative extension programs, curriculum, discipline, follow-up studies, 4-H Clubs, food preservation programs, Future Farmers of America, instructional materials, international education, job satisfaction, needs assessment, recruitment, role studies, safety, sex roles/stereotyping, special needs students, summer programs, supervised occupational experience programs, teacher education programs, teaching techniques, technical agriculture, vocational agriculture programs, vocational agriculture teachers, and vocational education. (KC)

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SUMMARIES OF RESEARCH AND DEVELOPMENT ACTIVITIES IN AGRICULTURAL EDUCATION 1981 - 1982 in the United States of America

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by
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March, 1983

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PREFACE

This compilation is the seventh annual Summaries of Research and Development Activities in Agricultural Education in the United States of America. Included are abstracts of 155 studies completed during the period July 1, 1981 to June 30, 1982. Twenty-five of the completed studies represent staff research, 84 represent master's studies or theses and 46 are doctoral dissertations. Also included is a listing of the 175 studies reported as in progress for the 1982-1983 year. Studies are arranged alphabetically by state and by author within states. A subject index is included in the appendices.

This publication is an activity of the Research Committee, Agricultural Education Division, American Vocational Association. The location in ERIC of previous summaries of studies, both national and regional, is given in the appendices.

The editor acknowledges and expresses his gratitude to all of those who assisted with this effort. Special thanks is extended to Dr. Charlie M. Curtis, Director, School of Vocational Education, for his professional and monetary support of this activity; and to Mrs. Mary McMinn, Secretary, Department of Vocational Agricultural Education, for her many hours of work in helping to edit the final publication and for keeping financial records; and to my family who supported the many night hours it took to complete the compilation and editing process.

Joe W. Kotrlik

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SUMMARIES OF RESEARCH AND DEVELOPMENT ACTIVITIES
IN AGRICULTURAL EDUCATION, 1981-1982

ALABAMA

FINDLAY, Henry J. "Factors that Influence the Career Objectives of Agriculture Students." Master of Science Thesis, 1982, Tuskegee Institute, Tuskegee.

Purpose. The purpose of this study was to identify factors and clusters of individuals that influenced students who pursue agriculture career objectives at the two historically black four-year institutions in Alabama.

Methods. The population consisted of all the American students who were enrolled in agriculture disciplines in 1982 at the two historically black four-year institutions in Alabama -- Alabama A and M University and Tuskegee Institute -- and who completed at least one year of vocational agriculture in an American high school. The sampling procedure identified 90 students.

A four-part questionnaire was used to collect data from the sample. The first part of the questionnaire included 16 questions to gather data related to students' personal and situational characteristics; in the second part of the questionnaire, students were instructed to identify three individuals from a list of 22 and rank them according to the amount of influence these individuals had on their present agriculture career objective, and on each of 24 guidance services provided them while pursuing an agriculture objective. In parts three and four, students were asked to assess 23 variables related to their attitudes toward selected areas in the high school vocational agriculture curriculum and 13 areas related to perceived reasons why they enroll in vocational agriculture while in high school.

The questionnaire was pilot tested for content validity and reliability. Reliability coefficients (alpha) of .92 and .78 were observed for parts three and four, respectively for the questionnaire. The data gathered were coded and analyzed using the Statistical Package for the Social Sciences.

Findings. Major findings included: (1) the students ranked the immediate family cluster first, second and third as providing most assistance on all but one of 23 guidance services studied -- which indicates that the immediate family cluster is very influential in providing guidance services to students who pursue agriculture career objectives at historically black four-year institutions in Alabama and therefore, should be considered a priority in any effort to guide students who desire to pursue agriculture career objectives at the two historically black four-year institutions in Alabama and similar institutions in the southern region; (2) an ambition to pursue professional careers in agriculture was observed to be the primary reason why students enrolled in high school vocational agriculture, and (3) all 23 curriculum related variables studied were rated above average which indicates that the students perceived that they liked all areas of the high school vocational agriculture curriculum.

ARIZONA

BRUCE, David Victor. "Importation of Wood By Forest Plants in Southern Tier West Region of New York". Master of Agricultural Education Report, 1982, The University of Arizona, Tucson.

Purpose. The purpose of this study was to determine the reasons why the secondary forest plants in the Southern Tier West Region of New York State import wood raw materials that they are using in their manufacturing operations.

Method. A research inquiry was mailed to 45 secondary forest plants in the counties of Allegany, Cattaraugus and Chautauqua, which make up the Southern Tier West Region of New York State. Some questions asked for specific dollar value, form, species, description and quantities, while others were open ended, seeking opinions for purchasing from the Southern Tier West Region.

Findings. Fifty-seven point seventy-seven percent of the respondents returned the research inquiries, and it was found that from the 26 respondents, 67 percent of all the wood products used were imported. Results from an analysis of the specific regions from which wood imports were secured showed that the northeastern United States led the seven regions utilized in the study. The main factors which the responding firms indicated that would cause them to increase purchasing from the Southern Tier West were availability and price.

FADL EL SEED, Bakhita Baballa. "Analysis of Needs in Education and Water/Sanitation for a Selected Rural Area in Sudan". Master of Agricultural Education Report, 1981, The University of Arizona, Tucson.

Purpose. The primary purpose of this study was to determine what the perceptions of tenant farmers and professional social workers were towards educational and water/sanitation problems faced by rural communities in selected areas of Sudan.

Method. A total of 30 persons were sought as respondents to a mailed questionnaire developed. A stratified random sample included ten professional social workers and 20 farmers who were to give opinions and judgment as to the needs in education and water/sanitation needed by rural people in The White Nile Province. Data were analyzed by calculating frequency responses. Frequencies were used to calculate percentages and mean rating for each goal or activity.

Findings. Based upon the findings of the study, the following conclusions were drawn: (1) Farmers were well aware of the Social Service Department at Ed Dueim Agricultural Corporation and good contact and participation had been established; (2) Farmers and professionals tended to have similar perceptions regarding the needs in education and water/sanitation; and (3) a major conclusion of this study was that the more access to new technology a farmer had, the better he would be able to assess the needs for the use of technology and approved agricultural practices.

HANSEN, Mark L. "An Analysis of Arc Welding Fumes in Vocational Agriculture Laboratories in Arizona". Master of Science Thesis, 1982, The University of Arizona, Tucson.

Purpose. The purpose of this study was to determine the potential health hazard to students and teachers in vocational agriculture laboratories during arc welding activities when various types of exhaust systems were used.

Method. Fume and gas levels produced by the E-6011 electrode were measured in the breathing area of the student welder and the overall laboratory level with and without the ventilation system operating. Four types of ventilation systems were investigated and total particulates, iron oxide, manganese and nitrogen dioxide levels were measured.

Findings. It was determined a potential health hazard existed when there was no ventilation. It was also determined that there was not a potential health hazard from welding fumes when the ventilation system which was operating removed the fumes directly from the work area. Ventilation systems which removed welding fumes and gases directly from the work area provided air quality to meet OSHA standards and NIOSH/ACGIH recommendation.

MAATOUG, Mirghani Abdalla. "Extension Demonstration Farms as a Teaching Method in the Sudan". Master of Science Thesis, 1981, The University of Arizona, Tucson.

Purpose. The purpose of the study was to determine how Extension Agents in the Sudan utilized the extension demonstration farms as an extension teaching method designed to encourage farmers to adopt new ideas and practices.

Method. Data collected and analyzed were obtained by use of mailed questionnaire sent to all 135 Extension Agents who had an educational level above senior high school and who worked in the northern part of the Sudan.

Findings. The major findings included: (1) The farms were used as model farms and not as demonstration farms; (2) The Extension Agents used these farms to reach the community and the local adoption leaders; (3) Method demonstrations, result demonstrations and tours were teaching methods used within the farms; (4) The demonstration farms were viewed by the Extension Agents in Sudan as most effective in the evaluation stage; (5) Method and result demonstrations were viewed by Sudanese Extension Agents as the two most effective methods to use as follow-up methods; and (6) The demonstration farms were viewed by the Sudanese Extension Agents as very effective teaching methods.

SQUIRE, Patrick Joseph. "Factors Influencing State of Arizona Cooperative Extension 4-H Agents to Leave Their Profession". Master of Science Thesis, 1982, The University of Arizona, Tucson.

Purpose. The purpose of the study was to identify the factors that influenced State of Arizona Cooperative Extension 4-H agents to leave their profession between 1970 and 1981.

Method. A population comprised of 21 current and 32 former State of Arizona Cooperative Extension 4-H agents was utilized in the study. Data were collected via a mailed questionnaire.

Findings. Salary, weekend and evening meetings and pay per hour of work had "very much influence" on the former 4-H agents' decision to leave their profession. Current 4-H agents also indicated that salary, weekend and evening meetings and pay per hour of work might influence 4-H agents to leave their profession in Arizona. Working with youth to achieve goals and awards had more influence on both the former and current 4-H agents to enter 4-H as a profession than salary or their parents. Majority of the former 4-H agents who were employed at older ages (i.e., 28 years of age and above) tended to stay longer in the 4-H profession than those employed at younger ages (i.e., between 21-27 years of age).

ZAMUDIO, Guillermo Villalobos. "Using Skill Labs With Learning Disabled Students in Vocational Agriculture". Master of Science Thesis, 1982, The University of Arizona, Tucson.

Purpose. The purpose of this study was to determine the relative effectiveness of various methods of using Skill Labs designed for use with learning disabled students enrolled in vocational agriculture at the secondary level in Arizona high schools.

Method. Five schools were involved in this study. These five schools included 45 students who were considered learning disabled, 79 students who were considered non-learning disabled, five vocational agriculture teachers and three special education teachers. Students were divided into three groups: (1) non-agriculture learning disabled students; (2) vocational agriculture learning disabled and non-learning disabled students receiving instruction; and (3) vocational agriculture learning disabled and non-learning disabled students receiving non instruction on the lesson topic prior to conducting the Skill Lab. Mean posttest scores were compared for differences.

Findings. The findings included: (1) No statistically significant difference in understanding of the Germination Skill Lab appeared to exist where instruction and non-instruction were undertaken with non-learning disabled students; (2) no difference in completion time appeared to exist between agriculture and non-agriculture students using the Germination Skill Lab. This finding was based on averages and is not considered statistically significant; (3) A statistically significant difference appeared to exist between the group of non-agriculture learning disabled students versus the groups of vocational agriculture learning disabled students when the Germination Skill Lab was used with and without instruction on the subject matter of germination.

ZURBRICK, Phillip R. "Five Year Follow-up, 1977 Vocational Agricultural Graduates". Staff Study, Research Series 5, Department of Agricultural Education, 1982, The University of Arizona, Tucson.

Purpose. The purpose of this study was to determine the occupational status of vocational agriculture graduates five years after completion of the high school program and their utilization and evaluation of the competencies learned.

Method. The names and addresses of students completing vocational agriculture programs in 1977 were voluntarily submitted by their vocational agriculture teachers in the summer of 1977 to the researcher. A total of 188 program completers from 16 high schools were so identified. The former students were contacted via mailed questionnaires in the summer of 1978 and again in 1982.

Findings. The following major findings were derived from the study: (1) Vocational agriculture is training people for jobs requiring agricultural skills and knowledge. Further, such jobs are economically beneficial, as indicated by the reported annual earned income. (2) Competencies developed in vocational agriculture programs are being used by the program completers. (3) Students who have completed vocational agriculture have a strong appreciation of its worth as indicated by the number who would enroll in the program again.

ZURBRICK, Phillip R. "Agricultural Education Graduates, The University of Arizona 1971-1982". Staff Study, Department of Agricultural Education, Research Report 4, 1982, The University of Arizona, Tucson.

Purpose. The purpose of this study was to summarize and analyze the annual occupational survey of agricultural education graduates of The University of Arizona.

Method. Responses to the annual mailed survey of department graduates were summarized and analyzed to determine occupational status, economic information and to project future salaries.

Findings. A total of 72.9% of the graduates of the department have taught vocational agriculture for one or more years. A comparison of the percentage of females who have taught shows little difference (73.3%) from the department average. The 118 graduates on which data were available indicates that they were employed in 34 different job titles.

Economically, beginning salaries of vocational agriculture teachers have not kept pace with the consumer price index. The average annual percentage change in beginning salaries of vocational agriculture teachers from 1971 to 1980 was 6.9% in Arizona while the consumer price index averaged 11.2% increase annually. Salaries of experienced vocational agriculture teachers have, in fact, outpaced the increase in the consumer price index slightly over the same period. Both beginning teacher salaries and those of experienced teachers are projected based upon the past ten year period.

ZURBRICK, Phillip R. "Agricultural Employment in Selected Areas of Arizona - 1982". Agricultural Experiment Station, Research Report 282, 1982, The University of Arizona, Tucson.

Purpose. The purpose of this update study was to provide up-to-date information on occupational information on agricultural jobs in the State of Arizona.

Method. A 40 percent random sample of the identified businesses in the state known to employ people requiring agricultural competencies was undertaken. A total of 586 randomly sampled businesses participated in the study conducted via telephone, along with 82 new businesses not previously surveyed. The survey was conducted in the latter part of 1981.

Findings. Full-time employment was higher in 1981 in all instructional program areas of vocational agriculture than in any previous study. The percentages of the total employment by program areas revealed a definite shift with a reduction in production agriculture and an increase in horticulture. The need for employees possessing agricultural competencies in Arizona has continued to increase over the past decade in spite of rapid urbanization in parts of the state.

CALIFORNIA

LEISING, James G. "A study of the status of Supervised Occupational Experience Programs of California Vocational Agriculture Students." Staff study, 1982, The University of California, Davis.

Purpose. The purpose of this study was to determine students' and teachers' perceptions of supervised occupational experience in California and to determine the major factors related to conducting successful supervised occupational experience programs.

Method. A descriptive survey approach was used to study the objectives. The population for the study consisted of all California secondary vocational agriculture programs. A 20 percent random sample (80 Vo-Ag programs) was selected for inclusion in the survey. In each school, 20 percent of the students having completed one or more years of vocational agriculture were randomly selected. Questionnaires were administered by project staff to 1,047 students and 80 teachers.

Findings. The study revealed that 64 percent of the vocational agriculture students had participated in supervised projects sometime during high school. Teachers perceived that approximately 57 percent of their students had participated in supervised projects. The majority of students with supervised projects generally were: Enrolled in a district vocational agriculture program; were second year vocational agriculture students; Caucasian; received B or better grades in high school; perceived that SOEP was required; resided in rural areas; perceived a career in production agriculture; and invested 1,000 dollars or less in their supervised project. Students perceived that gaining experience and making money were the two most important reasons for having a project. Learning responsibility and developing management skills were listed by students as the most important benefits.

COLORADO

McCALL, Dale E. "The Status of Supervised Occupational Experience in Colorado Vocational Agriculture Programs." Doctor of Philosophy Dissertation, 1982, Colorado State University, Fort Collins.

Purpose. The purpose of this study was to determine the status of supervised occupational experience of 1981-1982 secondary and post-secondary vocational agriculture students in Colorado.

Method. The data for this study were collected through mail-out questionnaires from two Colorado populations. One population consisted of persons identified as full-time vocational agriculture instructors; the second population was composed of vocational agriculture students who were enrolled during the 1981-1982 school year.

Findings. Responses from 252 secondary and 41 post-secondary students and 76 secondary and 12 post-secondary instructors indicated the following major findings: (1) A much higher percentage of the secondary student respondents than the post-secondary student respondents were participating in supervised occupational experience. (2) The students utilized a variety of types of experiences to fulfill the supervised occupational experience requirement. (3) A high percentage of the schools provided the instructors with release time and transportation to supervise students' occupational experience programs. (4) A low percentage of the student respondents were receiving a minimum of three supervised occupational experience visits per year. (5) The instructors reported that a high percentage of the students in all instructional areas, except post-secondary horticulture, were participating in supervised occupational experience.

SHELHAMER, C. Van. "Impact of Agriculture Mechanics Inservice Training on Montana Vocational Agriculture Programs." Doctor of Philosophy Dissertation, 1982, Colorado State University, Fort Collins.

Purpose. The purpose of the study was to determine the impact of three years of Agriculture Mechanics Inservice Training on Montana vocational agriculture programs. To accomplish the purpose, the following objectives were utilized to direct the study: (1) Determine the extent and time of change in curriculum organization, instructional material usage, instructional methods, and time allocations as a result of inservice training in mechanics. (2) Determine the impact of inservice training techniques in bringing about changes in Montana's vocational agriculture programs. (3) Determine the effectiveness of inservice training when compared to other selected activities in bringing about change in Montana's vocational agriculture programs.

Method. A four-page questionnaire was developed, tested for face validity, and used to gather data from 46 Montana vocational agriculture teachers. One hundred percent of the population returned the questionnaires. Frequencies and t scores were computed on the resulting data as required to satisfy the objectives of the study.

Findings. The major findings included: (1) Inservice training in agriculture mechanics can and does influence what Montana's vocational agriculture teachers teach in their mechanics programs. Generally, inservice training will result in major instructional changes within instructional topics. (2) Inservice training in agriculture mechanics will result in major changes in instructional units taught, curriculum organization, instructional methods, or time allocated to an instructional topic. (3) Instructional techniques used during inservice training will influence the instructional technology used by vocational agriculture teachers. (4) Vocational agriculture teachers in Montana are likely to incorporate the agriculture mechanics inservice training into their programs within one year of the training session. (5) Teachers who chose not to participate in inservice training on mechanics indicated that Future Farmers of America Agriculture Mechanics Contests have more influence on their mechanics curriculum than do teachers who participate in inservice training. (6) Changes in teaching techniques can result from inservice education in a technical area.

FLORIDA

SCANLON, Dennis C., Arrington, Larry R., Cheek, Jimmy G., and Beeman, Carl E. "Identification of Recruitment Barriers to Vocational Training Programs as Perceived by Students, Teachers, Counselors, and Administrators in Selected Florida Schools." Staff Study, University of Florida, Gainesville, 1982.

Purpose. The central purpose of this study was to describe barriers to recruitment and retention of disadvantaged, unemployed, underemployed, and out-of-school youth as perceived by students, teachers, counselors, and administrators. In order to achieve this purpose the following specific objectives were developed as guidelines for conducting the study:

1. Identify and describe recruitment practices that have been used successfully to attract disadvantaged, unemployed, underemployed, and out-of-school youth.

2. Identify students who have re-enrolled in vocational training programs as a result of the identified practices and compare their perceptions of program barriers with students who exited prior to program completion and did not return.

3. Describe perceived barriers related to student recruitment and student retention (successful completion) identified by teachers, counselors, and administrators of vocational training programs.

Method. Three procedures were used for data collection. For objective one, on-site interviews were conducted with a sample of Florida area vocational school directors. Data for objective two were obtained through a telephone survey of area vocational school dropouts. A mail survey of area vocational school professional staff was used to collect data for objective three.

Findings. Among the findings were the following: (a) the recruitment practice which received the overall highest ranking in terms of frequency of use and perceived success was "personal contacts with prospective students made by past and present students;" (b) approximately 30 percent of those dropouts who returned cited personal contact by school faculty or past/present students as their main reason for returning; and (c) faculty groups perceived the financial need of students and inability to attend class as the greatest program barriers.

IDAHO

CHURCH, James A. "Perceptions of Northwest Vocational Agriculture Instructors Regarding Knowledge of Microcomputers and Value of Selected Microcomputer Programs in Agriculture." Non-thesis research paper, University of Idaho, Moscow.

Purpose. The purpose of this study was to determine microcomputer programs which would be of most value for use in vocational agriculture classrooms in the Pacific Northwest states of Idaho, Oregon, and Washington. Data was also collected on the awareness of microcomputer usage and the need for in-service training.

Method. All vocational agriculture instructors in Idaho and a random sample of 50 teachers from the states of Washington and Oregon were included in this study. Of the total sample size of 182 teachers, 110 responded to this study for a return of 60.4%. Data was collected on a mail questionnaire and analyzed for differences in means using analysis of the variance and a LSD post-hoc test.

Findings. Major findings were: (1) All teachers expressed only average awareness of microcomputer usage and programming capabilities; (2) The Apple system of microcomputing appeared to have the greatest accessibility to the vocational agriculture programs in each of the three states; (3) 64.7% of Oregon teachers and 36% of Idaho and Washington teachers had access to a microcomputer system; (4) All respondents suggested that additional microcomputer in-service would be desirable -- over half of the vo ag instructors in Idaho and Oregon and 40% of the instructors in Washington had participated in some type of in-service training. Financial analysis programs were rated by Northwest vo ag teachers as being of most value in their teaching programs. Budget and record-keeping programs are also rated very high.

DAVIS, Raynold D. "A Study of Factors Associated with the Tenure of Local 4-H Leaders in Idaho." Master of Science Thesis, 1981, University of Idaho, Moscow.

Purpose. The primary purpose of this study was to determine if there were factors that could be used to select as 4-H leaders those individuals who would be more apt to continue in the 4-H program over a period of years. The specific factors that were considered in this study were: characteristics of volunteer leaders, the factors associated with leader tenure, personality traits of volunteer leaders and volunteer leader training.

Method. The sample in this study was selected from leaders and former leaders in the Idaho volunteer 4-H leader program. This study was conducted in 20 of the 44 counties in the State of Idaho with 5 counties selected from each of 4 extension districts. In each of these selected counties, 15 leaders currently serving the 4-H program and 5 who dropped out during the last year were randomly selected. Of the 300 leaders currently serving the 4-H program, 185 questionnaires were returned for 61.7%. Of the 88 questionnaires mailed to former leaders, 49 or 55.7% were returned. A total of 231 (59.5%) questionnaires were returned.

Findings. The results of the study provided information to assist the Idaho extension staff in identifying prospective 4-H leaders who are likely to have longer tenure. Findings indicated that most leaders were married (89.6%), had children in the program (59.9%) and were former 4-H members (60.4%).

Results also pointed to factors that affect the retention and preference of leaders: (1) most former leaders (42.5%) were from one-leader clubs; (2) community-type clubs (more than one leader) had the greatest leader tenure; (3) leaders believe the ideal number of members per leader to be 6-10 youth; (4) jobs rated as much more inconvenient for leaders to perform included serving on camp staff, maintaining parent participation and developing parent interest; (5) in regard to leader training, data revealed most leaders (74.8%) received training from personal study rather than leader training meetings (32.6%).

RUSH, [illegible]l G. "The Importance of Selected Activities Affecting the Role of Vocational Agriculture Instructors as Perceived by Vocational Agriculture Instructors, Principals, and Superintendents in Idaho." Master of Science Thesis, 1982, University of Idaho, Moscow.

Purpose. The primary purpose of this study was to evaluate differences in how vocational agriculture instructors and their administrators view the importance of selected activities in which vocational agriculture instructors could or should be involved. Data to identify the amount of time vocational agriculture instructors should spend in carrying out the responsibilities of their job and the general satisfaction with and support for vocational agriculture programs are also analyzed.

Method. The population used for this study included vocational agriculture teachers, principals, and superintendents from all secondary schools in Idaho offering vocational agriculture. The instrument used in this study was originally developed by Cole (1977) and revised to accomplish the specific purposes of the Idaho study. The questionnaire was mailed to 82 vocational agriculture instructors, 66 principals, and 68 superintendents. An overall response rate of 88.4% was achieved.

Findings. Sixty-six questionnaire items representing duties or responsibilities of vocational agriculture teachers were rated by the respective respondant groups. The data indicated substantial agreement among vocational agriculture instructors and their administrators regarding their roles and responsibilities as part of the vocational agriculture program. Major findings included: (1) Activities related to maintaining a safe environment in vocational agriculture facilities are of extreme importance; (2) Maintaining an active FFA chapter was rated higher than teaching agricultural classes by both the teacher and superintendent respondant groups; (3) Requiring SOE visitation was regarded as extremely important by all groups, with the administrators regarding the number of SOE visits needed as being greater than teachers.

Areas of potential disagreement existed in the importance of technical agriculture in-service education to vo ag programs, public relations activities for promoting the vocational agriculture/FFA program, the importance of using the summer program for visiting potential students and the importance of non-vocational activities for vocational agriculture instructors.

ILLINOIS

EKO, Adegbola Moizdeen "Strategy for Improving Beef Production in Nigeria." Master of Science Thesis, 1982, Southern Illinois University, Carbondale.

Purpose. The purpose of this study was to identify extension education methods useful for improving the low level of beef production in Nigeria, with emphasis on the major contributing factor - nomadism.

Method. A questionnaire was developed to identify and determine extension methods which could be easily adopted and well suited to the problem. Information was obtained from instructors, extension agents and international students, with experience in beef production systems and education.

Findings. The adoption of recommended practices in the beef industry can be extended to the nomads through a careful evaluation of extension activities. The survey rated the use of Group Methods first, Individual Methods second, and Mass Contact last.

Frisch, Robert J. "Development of a Competency Based Curriculum in Fruit Production." Master of Science Thesis, 1982, Southern Illinois University, Carbondale.

Purpose. To develop a horticulture curriculum in fruit production as an introductory unit which can be used by students with little or no background in fruit production.

Method. Ten commercial fruit producers in Illinois were selected to supply the data for the study. A questionnaire was developed to determine the tasks in fruit production that are most frequently performed. The curriculum outline was developed by grouping the tasks into teachable units.

Findings. A fruit production curriculum was developed for use as a basic introductory unit for high school students.

PEPPLE, Jerry D. "Factors Associated With Teacher Use and Effectiveness of the Illinois Rural Core Curriculum in Agriculture." Doctor of Education Thesis, 1982, University of Illinois, Champaign-Urbana.

Purpose. The major purpose of this study was to evaluate the impact of Illinois' Rural Core I Curriculum in providing teachers with instructional materials and aids needed to teach selected problem areas. A second purpose of this study was to evaluate the impact Core I materials had in improving teachers' skills in: (a) program planning, (b) lesson planning, (c) problem solving, (d) student evaluation.

Method. The sample included in this study was all Illinois teachers of vocational agriculture who had obtained a copy of the Rural Core I Curriculum. Materials were distributed through workshop and non-workshop methods. The research instrument was developed to determine the degree of Core I use-rate and the effect core materials had on selected teaching situations. The instrument had a test-retest reliability of .81. The evaluation was conducted at the end of the first semester of school in 1981-82. Final usable responses were obtained from 222 (81.92%) respondents identified for this study. The data were analyzed by means, medians, modes, ranges, frequencies, scattergrams, Pearson product-moment correlations, canonical correlations and grouped responses to open-ended questions.

Findings. (1) Respondents taught a mean of 15 of the 26 Core I problem areas in the first semester with a mean use-rate of 3.1 on a five point Likert-type scale (1 = not at all and 5 = to a very high degree).

(2) No significant differences were detected on use-rate and effect on teaching when comparing groups with different class sizes; students having varying amounts of agricultural work experience; respondents having varying amounts of agricultural work experience; and respondents having varying amounts of teaching experience.

(3) The core curriculum influenced respondents to use a greater variety of classroom teaching methods.

(4) The greatest benefits to Illinois, in general, were in helping beginning teachers be more efficient in planning and organizing their classes and lesson plans; helping experienced teachers update their references and use different teaching methods; and standardizing and unifying agricultural programs in Illinois.

Skaggs, Benjamin J. "A Survey of American Agricultural University Students and Their Interest in International Agricultural Development Activities." Master of Science Thesis, 1982, Southern Illinois University, Carbondale.

Purpose. To survey American agricultural students at Southern Illinois University - Carbondale to determine their degree of interest in international agricultural development activities.

Methods. Two hundred randomly selected agricultural students attending SIU-C were asked to complete questionnaires inquiring of their interest level in international agricultural development activities.

Findings. Five conclusions were drawn from the questionnaire: 1) a reasonable, marked interest exists for international agricultural development activities 2) interest results from the university setting, mass media and family/friend discussions 3) most of the interest is from students with similar work experience 4) students are uncertain as to their preferred employment affiliation 5) students wish to be more informed concerning activities and career opportunities.

INDIANA

DURKES, James Frederick. "Teacher Assessment of Farm Safety Instruction." Master of Science Thesis, 1982, Purdue University, West Lafayette.

Purpose. The purpose of this study was to assess the process of farm safety instruction by vocational agriculture teachers in Indiana. Specific attention was directed at farm safety areas being taught and their activities, use of farm safety resources, determining possible relationships between age of the teacher, teaching experience, and student residences with hours of farm safety instruction, and identifying farm safety educational needs.

Method. A survey instrument was designed and sent to a sample of vocational agriculture instructors in Indiana. The sample upon which the data was based consisted of 183 teachers out of the possible 257 vocational agriculture teachers in the state who could have participated.

Findings. The findings of the study indicate that September, October, and November were the months during which farm safety instruction was emphasized most. Agricultural mechanics classes contained the greatest amount of farm safety instruction. Of the areas identified, farm shop safety was the area most often being taught. Films were identified as the most popular format of presenting farm safety information. Approximately 50.0 percent of the responding teachers reported that they set aside specific time in their curriculum to cover farm safety. Safety resources most frequently used by the responding teachers were For the Rest of Your Life (a film dealing the anhydrous ammonia safety), Purdue University publication S-71, "Using Anhydrous Ammonia Safely," Agricultural Machinery Safety (published by Deere and Company), and the Farm Safety Bulletins from the National Safety Council. The FFA Chapter Safety Award Program and the Pesticide Applicator Certification Training Program were the two safety activities identified as having the greatest participation. There are few significant relationships between the age of the teacher, the years of teaching experience, and the type of student residence with the hours of farm safety taught. Two special instructor resource kits on anhydrous ammonia and grain harvesting safety sent out prior to completion of the study were reported by the majority of teachers as being useful in the program.

PETERS, Jerry L. and MOORE, Gary E. "Where Should Departments of Agricultural Education by Located?: An Empirical Study." Staff Study, 1982, Purdue University, West Lafayette.

Purpose. The purpose of this study was to compare Departments of Agricultural Education housed in Colleges of Agriculture with those in Colleges of Education on ten variables. The variables were:

1. Number of tenure track faculty
2. Number of supported graduate students
3. Percent of departments who had faculty on twelve month contract
4. Number of out-of-state professional meetings attended
5. Amount of reimbursement for attending professional meetings
6. Size of operating budget
7. Starting salary for a beginning assistant professor
8. Enrollment in undergraduate and graduate programs
9. Accreditation of undergraduate and graduate programs
10. Difficulty in securing promotions

In this research, no consideration was given theoretical or philosophical factors, but only to the more materialistic or survival factors.

Method. The 83 departments of agricultural education served as the population for this study. The chairpersons of each department were asked to respond for their department. Data was gathered via a researcher developed questionnaire. A total of 32 items were contained on the instrument; of which many were based on points raised in the debates which have appeared in The Journal of the American Association of Teacher Educators in Agriculture.

Findings. There were not major differences between Departments of Agriculture Education located in Colleges of Education and those located in Colleges of Education. The number of faculty, supported graduate students, attendance at professional meetings, undergraduate enrollment and Masters enrollment was virtually the same. There was a tendency for programs located in Colleges of Education to be approved by NCATE more often than were similar programs in the Colleges of Agriculture. It appears as if departments located in Colleges of Agriculture have larger operating budgets.

The major differences appear to be in how department chairpersons perceive the atmosphere in which they are located. Regardless of college affiliation, the chairpersons believed agricultural education programs received stronger support from the Colleges of Agriculture, the quality of teaching and courses in Colleges of Agriculture were better, and it would be easier to get faculty promoted in Colleges of Agriculture. If given the opportunity to leave the College of Agriculture, departments which are housed there would not. The departments housed in the Colleges of Education tended to be undecided if they would move.

Considering all the variables presented in this paper, it appears as if the scales may tip slightly in favor of the Colleges of Agriculture.

TORMOEHLEN, Roger Lee. "The Nature and Proportion of Physical Impairments Among Indiana's Farm Operators." Master of Science Thesis, 1982, Purdue University, West Lafayette.

Purpose. The purpose of this study was to provide the basis for identifying the problems of the physically handicapped farm operators. The following objectives were established:

1. Determine the proportion of Indiana's active farm operators who have physical handicaps.

2. Determine the type of physical handicaps which hinder active farm operators in completing essential farm-related tasks.

3. Determine what physically handicapped farm operators perceive as significant barriers to their operation of agricultural equipment and completion of other essential farm-related tasks.

Method. The population studied consisted of 500 randomly selected farm operators from among Indiana's approximately 88,000 farms.

To gather the data desired, a survey was designed and administered to the sample population. One-hundred and ninety-six (196) farm operators returned useable data upon which this study is based.

Findings. The physical impairments suffered most frequently by farm operators were: 1) musculoskeletal impairments, 2) hearing impairments, 3) cardiovascular impairments, and 4) respiratory impairments.

Physically impaired farm operators were significantly older than the physically non-impaired farm operators. Physically impaired farm operators also were more likely to be overweight than physically non-impaired farm operators.

Overweight farm operators were more likely to suffer from respiratory, cardiovascular and musculoskeletal impairments than were the non-overweight farm operators. Overweight farm operators also tended to encounter more problems in the performance of essential farm-related tasks due to a physical impairment. Physical impairments caused overweight farm operators to be more reliant upon other people for help than were non-overwieght farm operators. Physical impairments prevent 17.3 percent of Indiana's farm operators from performing essential farm-related tasks while hindering 19.4 percent of the farm operators. Physically impaired farm operators are older than the physically non-impaired farm operators. Twenty-nine (29) percent of the physically impaired farm operators rely upon assistance from other people to complete essential farm-related tasks. Of the 66.8 percent of farm operators who are physically handicapped, modified farm equipment is used by 6.8 percent in order to complete essential farm-related tasks.

IOWA

ABDELHAMID, Abdouli. "Socio-economic Study of Irrigated Sector in Central Tunisia: Case Study, the Irrigated Perimeter of Gammouda." Master of Science Thesis, 1982, Iowa State University, Ames.

Purpose. The purpose of this study was to analyze the existing situation in the irrigated perimeter of Gammouda and to develop and compare three optimizing linear programming models for the area.

Method. The sample of this study included 63 farmers from the private irrigated perimeter of Gammouda. The researcher conducted personal interviews with the farmers to gather general, technical, economical, and financial information.

Findings. Small farms (3 or less ha.) dominated the study area. Farmers had very limited education and a majority were above 45 years of age. As farm size increased, hire labor increased while family labor decreased. Land productivity was higher for small farms than for large farms. Production factors switched away from labor toward capital and purchased inputs as farm size increased. Large farmers identified lack of efficient roads and transportation within the area as problems. Shortages of fertilizers and machinery were also identified as problems. The optimum plan for a profit maximization of farm/firm would be the combination of vegetable cropping and dairy production. This optimum was identified as being appropriate for small farms as well as larger farms in the area.

ANYANWU, Alphonsus Chijioke. "Communication Behavior of Professional Disseminators of Scientific Agricultural Knowledge: A Study of the Iowa Cooperative Extension Service. Doctor of Philosophy Dissertation, 1982, Iowa State University, Ames.

Purpose. The purpose of the study was to examine communication behavior of extension professionals in terms of 1) providing a conceptual framework to merge organizational and utilization theories, and 2) examine communication processes and dissemination of behaviors of three extension roles.

Method. A personal interview was used to collect data from 40 respondents in each of extension state and area specialists and extension county directors. Distribution mean scores and standard deviations were used to describe the sample. Modified Least Significant Differences Multiple Range test was used to determine statistically significant differences in mean scores among and between groups. Single and multiple regression analysis techniques were used to examine relative and strength of association between variables. Stepwise regression analysis examined the explanatory power of the independent variables on information processing and dissemination behavior.

Findings. The extension position occupied appeared to determine, in large measure, the degree of information processing and dissemination behavior. Higher role occupants, in general, tended to be more active than lower role occupants in information processing behavior. The reverse was the case for information dissemination. Organizational orientations were poor predictors of communication behavior. Beside the role occupied, only variables

relating to organizational initiation decisions (level of education, research experience, farm background) and organizational involvement (perception of sanctions from various souces, and internal and external peer interaction) gave any prediction of information processing and dissemination behavior. Other organizational concepts such as job satisfaction, concensus on goals, and conflict did not predict processing and dissemination behavior of extension personnel.

BERAN, John Charles. "The Value of Agricultura/Rural Development Training in the rural pastoral ministry in the Phillippines." Master of Science Thesis, 1982, Iowa State University, Ames.

Purpose. The primary objective of this study was to determine the value of agriculture/rural development training to pastors serving in rural parishes of the UCCP and UMC churches in the Phillippines.

Method. A four-part questionnaire was developed to obtain the information specified in the objectives of the study. Part I consisted of background information, Part II was designed to obtain information on the community development activities in which the pastors, and the churches they serve, had been involved during the preceding twelve months, Part III was designed to obtain the perceptions of the pastors regarding the helpfulness of their agricultura/rural development training in various areas of work in their ministries, and Part IV asked pastors to rate various agricultural/rural development areas of study according to their "potential helpfulness" in the rural pastoral ministry and to indicate areas in which they would personally like to have additional training. Responses were received from 237 pastors.

Findings. The findings of this study revealed that: 1) a very large percentage of pastors serving rural parishes of the UCCP and UMC had some training in agriculture and/or rural development, 2) pastors felt that the training in agriculture they had received was useful in their missionary work, 3) agricultural rural development training for pastors, directed toward enabling them to carry on projects and to be involved in rural development activities in parish and on projects and community was a very valid and important part of the pastor's total ministry, and 4) increased effectiveness in agricultural/rural development training may make it possible for a pastor to communicate more effectively with rural people.

BIRKENHOLZ, Robert Hames. "Experimental Evaluation of an Instructional Unit on Agriculture/Agribusiness Management." Doctor of Philosophy Dissertation, 1982, Iowa State University, Ames.

Purpose. The purpose of the study was to evaluate the effectiveness of an instructional unit on agriculture/agribusiness management in Iowa vocational agriculture classes.

Method. A pretest-posttest, control group design was used in the investigation. Sixteen vocational agriculture classes comprised the experimental treatment group, whereas twelve classes provided data for the control group.

Experimental group instructors were provided an agriculture/agribusiness management instructional unit and directed to use the approach suggested in their teaching. Control teachers were asked to focus their teaching on a list of problem areas and study questions upon which the instructional unit was based.

Knowledge and attitude inventories were administered to students as both pretests and posttests. Student and teacher data instruments were completed by respondents only at the end of the experiment.

Class means were analyzed as they were comprised of the experimental units which were initially selected. T-tests and analysis of variance were the main statistical procedures used in the study to test for mean differences.

Findings. Major findings of the study were: 1) there was a difference ($P<.05$) between pretest and posttest knowledge scores for both groups, 2) experimental classes increased their knowledge scores to a greater extent than did control classes during the experiment, 3) student attitudes toward agriculture/agribusiness management were essentially unchanged during the course of the experiment, and 4) experimental group teachers responded favorably to the quality and value of the instructional unit.

CARTER, Richard I. "Characteristics of Entering Students in the Agricultural Education Department." Staff Study, 1982, Iowa State University, Ames, IA.

Purpose. The purpose of this study was to develop a profile of freshmen and transfer students enrolled in Agricultural Education.

Method. A questionnaire was developed which requested demographic information on home residence, employment experiences, enrollment in vocational agriculture, participation in school and community activities, and influences on deciding to attend Iowa State University and major in Agricultural Education. The questionnaire was administered during fall semester to all students enrolled in an orientation class for new students. High school rank and ACT scores were added by the researchers for those students with data available.

Findings. Data was collected from 28 students and the major findings included: 1) more than 75 percent of the students lived on farms or rural acreages; 2) most of the students had taken vocational agriculture in high school (86%) and were members of the FFA (82%); 3) all but one of the students who were FFA members served as officers in their chapters; 4) seventy-five percent of the students indicated that their vocational agriculture instructors had an influence upon their decision to major in Agricultural Education; and 5) High School Rank and ACT scores were comparable to College of Agriculture and University scores for all new students.

CARTER, Richard I. "Factors Affecting Participation in FFA." Staff Study, 1982, Iowa State University, Ames, IA.

Purpose. The purpose of this study was to determine whether selected factors increased, decreased, or had no effect on whether members participated in their FFA chapters.

Method. An extensive literature review was conducted to identify factors influencing participation in groups. Forth of these factors were adapted to relate specifically to FFA and were developed into a questionnaire. Chapter delegates to the 1982 Iowa FFA Association Conference were asked to complete the survey. Two hundred and sixty-four delegates responded by indicating whether each factor increased, decreased, or had no effect on members' participation in FFA.

Findings. Respondents were in agreement that several factors increased participation while others decreased participation in FFA. Ten factors were identified by more than 75 percent of the respondents to increase participation. These factors related mainly to the reputation of the FFA chapter and whether the chapter was run by the membership as a whole. Factors perceived by respondents to decrease participation related to: 1) officers neglecting their responsibilities and officers planning most of the activities; 2) conflict with other school activities; and 3) chapter activities being conducted by a few members. Different backgrounds of members and the size of chapter were not perceived as either increasing or decreasing participation. Respondents were equally divided with approximately one-third in each category, on whether requiring vocational agriculture students to join FFA would affect participation.

FARD-SARHANGI, Exatollah. "Animal Science Technical Competencies Needed by Vocational Agriculture Instructors." Doctor of Philosophy Dissertation, 1982, Iowa State University, Ames.

Purpose. The primary purpose of this study was to identify animal science technical competencies needed by vocational agriculture instructors as perceived by cattle and pork producers and vocational agriculture instructors.

Method. The research procedure was survey, with data collected by means of mailed questionnaires that were sent to randomly selected Iowa vocational agriculture instructors and members of the Iowa pork, sheep, and cattle producer's associations. A total of 260 respondents was included in this study.

One hundred and twenty-six animal science technical competencies were selected and included in the study in the areas of selection, nutrition, breeding, management, health, marketing, and record keeping.

Findings. Major findings of this study were: 1) Most animal science competencies were needed by vocational agriculture instructors, 2) sheep, pork, and cattle producer groups did not differ significantly in the degree of competence needed by vocational agriculture instructors for many of the 126 competencies, whereas instructors and livestock producer groups differed significantly in the majority of competencies, 3) vocational agriculture instructors believed that they possessed either average or above average competence in 117 animal science technical competencies, 4) vocational agriculture instructors' responses revealed that for all animal science areas included in this study, the composite mean scores of degree of competence possessed were less than the degree of competence needed, and 5) most acquisitions of animal science technical competencies cam from college or on the job.

HOSSEINI, Hossein. "Experimental Evaluation of An Instructional Unit on Soil Fertility and Fertilizers." Doctor of Philosophy Dissertation, 1982, Iowa State University, Ames.

Purpose. The purpose of this study was to evaluate the effectiveness of an instructional unit on soil fertility and fertilizers in Iowa vocational agriculture classes.

Method. A pretest-posttest control group design was used in the investigation. Fifteen teachers and their classes comprised a randomly assigned experimental treatment group. Similarly, twelve randomly assigned teachers and their classes provided data from a control group. The "experimental treatment" was an instructional unit on soil fertility and fertilizers designed for use by vocational agriculture teachers. Experimental group teachers used the unit in their instruction, whereas control group teachers were asked to focus their teaching on a list of problem areas and study questions identified in the unit using their "normal" materials.

Soil fertility knowledge and the attitude inventory instruments were administered to students as both pretests and posttests. Experimental units were considered to be classes and class means were used in the analyses. The main statistical procedure used was analysis of coveriance with one factor and one covariate (pretest scores).

Findings. Major findings of the study were: 1) postest knowledge scores were significantly ($P < .01$) higher than pretest scores for both groups, 2) posttest knowledge scores for the experimental group classes were significantly ($P < .05$) higher than those for the control group classes adjusting for the covariate, 3) overall posttest attitude scores were significantly ($P < .05$) higher than pretest attitude scores for the experimental treatment group, 4) experimental group posttest attitude scores related to the concept of fertilizer decision-making was significantly higher than those of the control group using pretest scores as covariate.

NWOZUZU, Emmanuel Ibe. "Involvement in Nonteaching Activities of Vocational Agriculture Teachers in Iowa." Master of Science Thesis, 1982, Iowa State University, Ames.

Purpose. The purpose of this study was to determine what administrative activities vocational agriculture teachers should perform and to compare that information with what activities they actually perform.

Method. Iowa school systems that conducted four-year vocational agriculture programs were stratified according to total school enrollment and a proportionate stratified sample of schools was selected. A 25 percent sample of these schools were selected for this study. Vocational agriculture teachers and principals in the selected schools constituted the sample for this investigation. Questionnaires were mailed to 75 vocational agriculture teachers and to their principals. Responses were received from 60 teachers and 60 principals resulting in an 80 percent overall response rate.

Findings. The mean frequency with which activities were performed ranged from 1.4 to 7.3 as reported by the vocational agriculture teachers. Principal group responses to the number of times those same activities should be conducted ranged from 1.5 to 6.0. The mean number of times teachers should

be involved in nonteaching activities was generally higher than the mean number of times teachers were involved in those same activities. Principal and teacher respondent group differences were generally found to be significant.

The mean number of times teachers reportedly performed nonteaching activities was higher than the mean number of times the principals perceived they had conducted those activities. Vocational agriculture teachers and principals revealed highest frequency values for directing activities.

Paired t-tests used to test for mean differences between principal and teacher gropus were generally found to be significant for items concerning what activities vocational agriculture teachers conducted. T-tests did not reveal significant differences for items concerning what activities teachers should do.

OLARICKACHARD, Paranee. "An Evaluation of the Training Program at the National Swine Research and Training Center in Thailand." Doctor of Philosophy Dissertation, 1982, Iowa State University, Ames.

Purpose. The primary purpose of this study was to determine the level of importance and the level of effectiveness of the training program at the National Swine Research and Training Center (NSRTC) as perceived by the former participants, especially as it related to the role of the NSRTC in developing swine production in Thailand.

Method. The population of the study was composed of all former participants of the training program during 1977-80 (4th through 12th classes) who were categorized as farmers, agricultural teachers, and government officials. The data were collected from a stratified random sample of 77 farmers by personal interview, whereas usable responses to mail questionnaires were obtained from 26 (100 persons) of selected teachers and 46 (92 percent) of selected wardens. Each of three instruments which were basically the same was used to obtain information from respondents in each category. Statistical procedures used in analyzing the data included frequencies, central tendency, chi-square, paired t-test, and one-way analysis of variance.

Findings. Based on the study, it was concluded that: 1) the program affected the improvement of swine production in Thailand in some aspects, 2) the program that dealt with increasing of participants' competencies in swine production was a success to some degree, 3) the activities that were used in the program were effective in increasing the competencies, 4) the program that dealt with the utilization of modern practice in swine production was a success in the technological aspect, 5) the program was being conducted to meet the needs and desires of the audience, and 6) there is a definite need for further training in most of the subject areas which related to technological knowledge in swine production for Thailand.

SCHEID, Carl Lee. "Organizational and Instructional Problems of Selected Iowa Teachers of Vocational Agriculture." Master of Science Thesis, 1982, Iowa State University, Ames.

Purpose. The purpose of this study was to determine the problems encountered by beginning teachers of vocational agriculture in conducting comprehensive vocational agriculture programs and to compare these findings

with problems encountered by vocational agriculture teachers who have been in the profession for varying number of years.

Method. A list of vocational agriculture departments in the state of Iowa was obtained from the Iowa State Department of Public Instruction. Survey instruments containing a list of 100 selected activities were sent to 60 randomly selected vocational agriculture teachers on the above list of vocational agriculture departments. The teachers were asked to rate the activities from least difficult to most difficult.

Findings. The 100 activities used in this study were grouped into eleven broad program areas. The program area entitled "Conducting an Adult Program" had the highest mean score among the eleven program areas. The program area entitled "Relationships with Faculty, Administration, and Students" had the lowest degree of difficulty mean score for the first-year teachers and those teachers having taught over five years and was the program area with the lowest total mean score, whereas the program area entitled "Providing Guidance" had the lowest mean score for the second-year teacher group and those teachers having taught from three to five years.

The activity "motivating FFA committees to function" was ranked as the most difficult activity in the program area "Advising the FFA" by all four teacher groups. Organizing young and adult farmer classes and conducting a year-around adult farmer program were activities ranked at the top of the twenty most difficult activities followed by activities allotting personal time and time for a summer vacation. Professional and personal time management was noted to difficult for most teachers that were surveyed. The majority of activities listed as being most difficult were Conducting an Adult Program, Classroom Teaching, and Occupational Experience Programs program areas.

SHORTER, George S. "Effect of a Supervised Occupational Experience Instructional Packet on Vocational Agriculture Student Economic Involvement in Agriculture." Ph.D. Dissertation, 1981, Iowa State University, Ames.

Purpose. The major purpose of this study was to evaluate the long-term effect of a supervised occupational experience (SOE) instructional packet on students' economic involvement in agriculture.

Method. This study provided a follow-up measure for an experiment conducted to evaluate an SOE instructional packet. Students in experimental schools where the packet was used were compared to students in control schools where the packet was not available. This assessment was made two years after the original treatment to study students' economic involvement in agriculture. An Involvement in Agriculture Inventory was used to collect data for the study.

Findings. Major findings include: 1) over one-half of the students planned to enter occupations in production agriculture; 2) market hogs were produced by one-third of the total sample of students; 3) one-third of the students had produced and harvested crops as part of their SOE programs; 4) about one-half of the students had received experience through farm placement SOE programs; 5) only five percent had participated in agribusiness SOE programs; and 6) no significant difference was observed between students in the original experimental and control groups with regard to breeding livestock, market livestock, crops harvested, hours of paid labor, nor net worth.

KANSAS

AKPEHE, Athanasius A. "An Evaluation of the Curriculum of the Agricultural Training Centers of Northern States of Nigeria." Master of Science Thesis, Kansas State University, Manhattan.

Purpose. The primary purpose of this study was to detmine the relevance of the course offered at the Agricultural Training Centers in Northern States of Nigeria as to the types of jobs that graduates would be required to perform after their graduation. This study was also to determine the level of importance of the 117 subjects taught in the 14 agriculture courses.

Method. The population for the study was limited to 100 supervisors of graduates who were reading in the fields of agriculture and home economics at both Kansas State and Fort Hays State Universities at the time of this study. The 14 agricultural courses included in the study were Agricultural Extension, Agronomy/Crop Production, Horticulture, Livestock (Animal Science), Farm Management, Agricultural Mechanization, Soil and Soil Conservation, Agricultural Mathematics/Surveying, Meteorology and Geography, Home Economics, Health and Sanitation, English Language, Basic Science and Government procedure. These courses were subdivided into 117 subjects.

Findings. A research instrument was developed to allow the participants to rate the level of importance of the 117 subjects for teaching the 14 agricultural courses. Four hypotheses were developed as follows:
(1) There are no significant differences in the responses of the supervisors of graduates by years of job experience as to the importance of courses or subjects offered in the Agricultural Training Centers in Northern States of Nigeria.
(2) There are no significant differences in the responses of the supervisors of graduates who had agricultural extension, livestock (animal science) or home economics assignments as to the importance of courses or subjects offered in the Agricultural Training Centers in Northern States of Nigeria.
(3) There are no significant differences in the responses of the supervisors of graduates by degree status as to the importance of courses or subjects offered in Agricultural Training Centers in the Northern States of Nigeria.
(4) There are no significant differences in the responses of the supervisors of graduates from Samaru, Kabba Jos and Kaduna as to the importance of courses or subjects offered in the Agricultural Training Centers of Northern States of Nigeria.

The Analysis of Variance Statistical procedure was used to test the four null hypotheses. The F distribution at 0.050 level of significance was used to determine the significant differences between the responses of the subgroups. All of the four null hypotheses were retained.

FRENCH, Byron T. "Importance and Location of Instruction for Sixty-Eight Energy Competencies for Kansas Agriculture." Doctor of Philosophy Dissertation, Kansas State University, Manhattan.

Purpose. The two primary objectives of this study were: to identify which energy competencies had importance to Kansas agriculture and to determine how appropriate each competency was for three levels of instruction: high school, Area Vocational-Technical School or Community College, or four year college.

Method. An energy questionnaire, comprised of 68 competencies, was completed by 140 individuals and provided data to meet the study's primary objectives. Thirty-five returns were received from each of four groups: Young Farmers/Young Farm Wives, High School Vo-Ag teachers, Postsecondary AVTS-CC Agricultural teachers, and County Extension Directors.

Secondary objectives analyzed the effects of age, educational attainment, years engaged in agriculture, interest/expertise in agricultural mechanics, and practical energy experience.

The ANOVA procedure was used to test the two primary hypotheses and the ten secondary hypotheses for demographic effects. The appropriate Tukey (HSD) or Scheffe statistical procedures were used to determine which groups differed.

Findings. The four groups surveyed had 4 significant differences in rating the appropriateness of instruction at the three locations. Age and practical energy experience caused seven significant differences in responses for importance but no differences in appropriateness for locations of instruction. Other demographic factors had neglegible effects on responses.

Of the 68 energy competencies, 36 were rated 'very important', 28 'important', and 4 as having 'some importance' to Kansas agriculture.

HADEJIA, Ibrahim U. "A Study of the Role and Problems of the Agricultural Information Services in the Northern States of Nigeria." Master of Science Thesis, Kansas State University, Manhattan.

Purpose. The purpose of this study was to investigate the role and problems of the Agricultural Information Services of the Extension Services in the Northern States of Nigeria. The primary aims were to determine the importance of forty-six functions, requirements, departmental activities, and problems in the order of priority, and to determine which needed attention.

Method. The respondents for the study were limited to seventy-nine persons previously employed by various state ministries of agriculture in the Northern States of Nigeria but presently going to colleges at Kansas State University and Fort Hays State University.

A nine-page questionnaire was used to collect the data in the study. The questionnaire contained the forty-six items relevant to the functions, requirements, departmental activities, and problems of the Agricultural Information Services. These items included: 13 functions; 11 requirements; 9 departmental activities; and 13 problems associated with the Agricultural Information Services.

Findings. Three hypotheses stated in the null form served as the basis for analyzing the results of the study:
(1) There are no signigicant differences in the opinion of extension staff members by rank as to the importance of the functions, requirements, activities and problems of Agricultural Information Services.
(2) There are no significant differences in the opinion of the extension staff members by sex as to the functions, requirements, activities and problems of the Agricultural Information Services.

(3) There are no significant differences in the opinions of the extension staff members by years of extension experience as to the functions, requirements, activities and problems of the Agricultural Information Services.

A repeated measures of analysis of variance and t-test were used as statistical treatments to determine if any significant differences existed in the opinions of the extension staff members. There were no significant differences found at the .05 level in the opinion of extension staff members as indicated by hypothesis number one, two, and three. This indicated a general consensus on the importance of the functions, requirements, activities, and problems of the Agricultural Information Services.

PARMLEY, John D. "The Need for Vocational Agricultural Instruction in Kansas Counties Where Such Instruction Does Not Exist." Staff Study, 1982, Kansas State University, Manhattan.

Purpose. The primary purpose of the study was to determine why instruction leading to employment in the states' most basic industry was not offered by school districts during the 1981-82 school year.

Method. The target population of this study was the rural residents and agribusiness personnel located in the 14 Kansas counties in which vocational agriculture instruction was not offered during the 1981-82 school year. The accessible population was the randomly selected rural residents and agribusiness personnel in the 14 counties.

A Vocational Agriculture Program Survey was developed and field tested. After determining that the reliability of the instrument was satisfactory, the questionnaire was forwarded to randomly selected individuals. A School District Survey was also developed to provide for school administration input. The School District Survey was mailed to the superintendent of each unified school district located in each identified county. Following the initial return of responses, each non-respondent received a second mailing. Following this additional response, a randomly selected survey of non-respondents was conducted to determine if differences existed between the respondent and non-respondent groups. Significant differences were not found.

Findings. The reasons most often expressed by administrators for not offering vocational agriculture were: 1) lack of student interest, 2) lack of adequate facilities, 3) lack of adequate finances and 4) lack of need for vocational agriculture.

After reviewing information about vocational agriculture instruction, rural resident and agribusiness respondents in all 14 counties agreed that vocational agriculture instruction was needed. Respondents indicated that they desired instruction in production agriculture, agricultural mechanics and agricultural sales and services.

LOUISIANA

BUDDLE, Donald A. "Cooperative Relationships Between County Extension Agents and Vocational Agriculture Teachers in Louisiana." Doctor of Philosophy Dissertation, Louisiana State University, Baton Rouge.

Purpose. The purpose of this study was to analyze selected activities and factors in cooperative relationships of county extension agents and teachers of vocational agriculture in Louisiana and to determine differences in opinions regarding these cooperative relationships.

Method. The descriptive method of research was used with the questionnaire utilized as the instrument for data collection. Information was gathered from vocational agriculture teachers and county extension agents in Louisiana parishes where both professional groups were employed. Returns were received from 126 (90 percent) of the 140 agricultural agents and 122 (80.3 percent) of the 152 teachers contacted.

Findings. The extent to which activities in cooperative relationships were carried out varied among agents and teachers. The two groups also varied in their opinions regarding the degree of involvement of selected factors in their cooperative relationships.

The study revealed that opinions of teachers and agents did not differ significantly regarding the desirability of carrying out fifteen activities but differed significantly regarding seven activities.

The study also revealed that both groups did not differ significantly in opinions concerning the involvement of three factors in educational programs in agriculture but they differed significantly regarding the other sixteen factors.

No relationship was found between age and college degrees achieved and the opinions of teachers regarding the desirability of carrying out selected activities for implementing educational programs in agriculture. A low, negative correlation of -.25 indicated that as length of experience of teachers increased, the desirability of developing means of publicizing results of evaluating educational programs in agriculture decreased.

A low, negative correlation of -.22 denoted that older agents seemed less in favor of the activity of developing criteria for agricultural projects of FFA and 4-H club members. Years of experience of agents was positively associated with their opinions regarding conducting community agricultural surveys. Agents with more experience seemed in favor of the activity to a greater degree than agents with less experience. No relationship was found between college degree held by the agents and their opinions, regarding the desirability of carrying out selected activities for implementing educational programs in agriculture.

KOTRLIK, Joe W., Woodley, W. Steve and Sharp, Annette. "A Comparison of Perceived Job Satisfaction of Non-Vocational and Vocational Teachers." Staff Study, Louisiana State University, Baton Rouge.

Purpose. The purpose of this study was to compare the perceived level of job satisfaction of vocational and non-vocational teachers in public high schools in Louisiana.

Method. The descriptive survey method of research was used in this study. A questionnaire (Appendix A) consisting of ten items was mailed to 500 public high school teachers in ten randomly selected parishes. A proportionate random sample size of 225 vocational teachers and 275 non-vocational teachers was selected from each of the ten parishes using a list obtained from the Louisiana State Department of Education.

The questionnaire was mailed to teachers at their school address. The first mailout yielded a 50.73 percent response rate. Two weeks later, a follow-up was conducted by mailing another questionnaire to non-respondents. An additional 110 responses were received, which brought the total number of useable responses to 355, or 72.3 percent. Of the 355 questionnaires returned, 161 or 72.9 percent were from the 270 non-vocational teachers sampled.

Findings. The mean number of years teaching was 13.19 for the non-vocational teachers and 12.41 years for the vocational teachers.

In addition, teachers were asked to respond to eight questions that were designed to secure their responses regarding several indicators related to perceived job satisfaction. The data indicate that the teachers surveyed perceived that they were satisfied with their jobs. The teachers responded in a positive manner or were neutral in their responses to all eight questions.

When the responses were analyzed using the t-test at the .05 level, significant differences between the responses of vocational and non-vocational teachers were found on two items. Vocational teachers responses indicated that they were significantly more likely to encourage their students to go into teaching in their subject matter area than were non-vocational teachers.

Also, vocational teachers were significantly less likely to perceive that there was a subject matter area where they felt the teachers were more satisfied with their jobs than they were.

Six of the items yielded no significant differences between the responses of non-vocational and vocational teachers at the .05 level. For all six questions, the vocational teachers' responses indicated a higher level of perceived job satisfaction than the responses from the non-vocational teachers, but the differences were not significant at the .05 level.

KOTRLIK, Joe W. and Garland, JoAnne S. "An Assessment of the Need for School-Community Food Preservation Centers in Louisiana." Funded Staff Study, Louisiana State University, Baton Rouge.

Purpose. The purpose of this study was to assess the status of the Louisiana School-Community Food Preservation (LSCFP) program. Specifically, efforts were made to measure: 1. Attitudes held by vocational agriculture teachers, vocational education supervisors, meat merchandisers; LSCFP patrons and former students toward the LSCFP program; 2. Educational effectiveness of the LSCFP program; 3. Extent of educational activities conducted for both youth and adults in this program; and 4. Social and economic benefits derived from this program by students, patrons, communities and the state.

Method. The populations and sampling procedures used in the study were: 1. All vocational agriculture/agribusiness teachers employed in Louisiana's public schools during the 1981-82 school year stratified into two groups: those employed in schools with LSCFP centers and those not affiliated with the LSCFP program; 2. All vocational education supervisors employed in Louisiana's public school systems with vocational agriculture/agribusiness programs and/or LSCFP programs in operation stratified like the teachers; 3. A random sample of 350 of the 1620 retail managers of meat markets, meat processing plants, slaughter houses and other retail outlets for fresh meat in Louisiana. 4. All students who were identified by teachers as enrolled in a vocational agriculture/ agribusiness department with a LSCFP program and who had received food processing instruction; and 5. All patrons of LSCFP facilities (10 requested from each teacher) identified by vocational agriculture teachers who cooperated. Seven different questionnaires were developed consisting of checklists and short answer statements as well as attitude statements with a Likert scale choice of responses. Two mailouts were used to secure the data.

Findings. Only 76 percent of the teachers with centers taught food processing. Twenty of the 47 teachers with centers who taught food processing taught it for 30 hours or less per year. Seventeen of the 62 teachers with centers had never formally studied food processing. Only 19 teachers had completed college course(s) in food processing. Less than 50 percent of the supervisors judged the amount of time allotted to food processing instruction and the curriculum materials being used as either good or excellent. Only 50 percent of the former students felt they gained skills necessary for employment in food processing. Only 19.1 percent of the former students became interested in a career in food processing as a result of training in the program. Only four teachers with centers taught adult food processing classes. Fourteen supervisors with centers (46.7 percent) rated the adult education program in food processing as poor. Less than 10 percent of the patrons indicated that adult classes in food processing were being taught at their centers. Teachers, supervisors, former students and patrons agreed that the program was important in the community. Adults were reported to be using the centers' facilities by 80.6 percent of the teachers with centers. Over 90.0 percent of former students reported that they gained skills that helped them to process food for home use. Half of the supervisors in school systems without LSCFP centers indicated their parishes needed LSCFP programs. Over two-thirds of the teachers without centers indicated a need for a LSCFP program. Over half of the teachers without centers indicated that their programs would be more effective if they had a LSCFP program.

MARYLAND

COOPER, Elmer L. and Clifford L. Nelson. "Vocational Agriculture in the Eastern Region of the U.S.--An Analysis of Programs, Teachers, Students and the FFA." Staff study, 1982, University of Maryland, College Park.

Purpose. The purpose of this study was to develop instruments and conduct an analysis of programs, teachers, students and the FFA in the U.S. This report covers the Eastern FFA Region.

Method. Four instruments were developed by reviewing other surveys, utilizing guidance from the National FFA staff, and conducting an extensive pilot. Samples of vocational agriculture teachers and students in the Eastern FFA Region responded by way of mailed questionnaires.

Findings: As of the fall of 1980, the vo-ag departments and programs in the fifteen-state Eastern Region of the FFA may be characterized as follows: 1) Most have FFA chapters (92 percent); 2) enrollments per department range from very large (429) to very small (15); 3) average enrollment is 88; 4) changes in departmental enrollments from 1977 to 1980 varied--one-third increased, one-third decreased, and one-third stayed the same; 5) over half of the vo-ag departments have programs for grades 9-12; 6) over half of the departments are multi-teacher--the largest had 8 teachers; 7) nearly 90 percent of the departments have full-year courses; 8) production agriculture and ornamental horticulture are the most prevalent programs; 9) nearly 85 percent have an agricultural mechanics shop and 60 percent have a greenhouse; 10) most programs are housed in senior high schools and classify their students as rural; 11) nearly 80 percent have FFA meetings during the school days; and, 12) nearly 90 percent of members pay their own FFA dues.

According to the respondents, vo-ag teachers in the Eastern Region: 1) are predominently males (81 percent); 2) have teaching experience ranging from 1-34 years, with a mode of 1 (most taught 10 years or less); 3) most (71%) are on 11 or 12 month employment; 3) most (over 85%) had no change of contract length in the last 5 years; 5) 26 percent were not fully certified; 6) nearly 90 percent were half-time or more in teaching agriculture; 7) one-half had been FFA members in high school; and, 8) only 76 percent had FFA experience or training to be FFA advisors when they started in their first teaching job.

Students enrolled in vo-ag in the Eastern Region may be characterized as follows: 1) over 82 percent are FFA members; 2) ages range from 13 to 19; 3) most (86%) FFA members are males and 14 percent females; 4) a high percentage of production agriculture students are FFA members, but a relatively high incidence of non-membership prevails in specialized programs; 5) members and non-members said FFA would be improved by more social, more job-related, and more contest-type activities; and 6) only 6 percent of non-FFA members reported that the FFA dues requirement prevented them from joining.

As a result of this study, a number of recommendations were made.

MICHAEL, Boyd J. "An Assessment of Present and Future Needs for Workers Having Agricultural Competencies and An Assessment of Personal Characteristics Employers Desire of Agricultural Workers in Washington County, Maryland." Master of Science Thesis, 1982, University of Maryland, College Park.

Purpose. The purposes of this study were to determine the availability of positions requiring competencies of students graduating from Washington County high schools with a vocational agriculture background and to determine employers' opinions concerning desirable personal characteristics, attitudes, and competencies of workers.

Method. The study consisted of two different surveys mailed to either farmers or agribusiness employers in Washington County. A 50% sample of non-Mennonite farmers in the county was randomly selected to be surveyed. All identified agribusinesses in the county were surveyed and non-returned surveys were followed up with a telephone call. Description and comparative data were obtained by computer and calculator.

Findings. The results indicated by the 162 agribusinesses and the 140 farmer respondents show a total of 924 full-time and 821 part-time current agribusiness employees in Washington County. One hundred forty or 48% of all the non-Mennonite farmers in the county returned the farm survey. The returned surveys totaled 189 full-time and 186 part-time farm employees. "Works regularly and on time" was the first choice of personal characteristics by each group. Eighty-five percent of employers hire people with satisfactory agricultural knowledge and skills. Fifty-two percent of employers "always" or "sometimes" hire students with high school agriculture background. From the findings of this study it was concluded that there were approximately 1736 full-time and 1619 part-time agricultural employees in Washington County, Maryland in 1982. By extrapolation it was concluded that the number of agricultural employees for the county total approximately 3335 workers. Further, projections provided by the respondents seem to indicate that the number of employees in agribusinesses and on farms will remain constant or increase slightly over the next five years from 1982 through 1987.

NELSON, Clifford L., GRUNIG, James E. and RICHBURG, Susie. "Toward More Efficient Extension and Education: Communication Behaviors of Maryland Poultry and Dairy Farmers." Staff Study, 1982, University of Maryland, College Park.

Purpose. To study the communication behaviors of two groups of adult producers to ascertain their information needs and habits of seeking information regarding their agricultural specialty to give direction to educational efforts of extension, vocational agriculture and agricultural communication specialists.

Method. Grunig's Situational Theory of Communication was used as the theoretical base for this research. Random samples of 408 poultry farmers and 500 dairy farmers were selected from industry organization lists in two separate studies. An industry keyed questionnaire was mailed to the samples. Mail and telephone follow-up were utilized to increase response. Randomly selected

nonrespondents were queried by phone on selected variables from the questionnaires. These were found to be representative of the respondents. A usable total of 214 poultry and 229 dairy questionnaires were returned. Data were analyzed using frequency counts, factor analysis and cannonical correlation followed by discriminant analysis to determine which of ten demographic variables discriminated between communication publics.

Findings. Internal, external and internal/external groups (Grunig's classification) of communication utilizers were found in the dairy and poultry groups. Internal tended to be younger, seek more information on day-to-day farming operation and stay close to the farm. The external group seeks information away from the farm often directly from the source. The internal group is generally younger and better educated with a larger farm operation. The external group tends to be in better financial shape. The internal/external group combines the characteristics of both. The poultry field man was the major information source for poultry. Topics relevant for internal farmers need to be carried on a systematic basis concentrating on problems of beginning farmers (financial and technical agriculture). Information for external publics (major farm issues away from the farm) might best be served by mass media, periodic meetings or publications. This suggests that systematic instruction be directed at younger farmers and concentrate on establishing financial security, while programs for the established farmers be delivered through mass media methods or large meetings.

REINHOLD, Charles H. "Feasibility of Supervised Occupational Experience Programs as an Integral Part of All Vocational Education Programs in Montgomery County Public Schools, Maryland." Non-Thesis Master's Study, 1982, University of Maryland, College Park.

Purpose. The Montgomery County Public Schools of Maryland will open its first vocational technical center in the fall of 1983. Since Montgomery County is expanding its investment in vocational education, it is imperative that vocational education programs be of superior quality. The purpose of this study was to determine the feasibility of requiring supervised occupational experience as a component of all vocational programs.

Method. The research was done with two written questionnaires, one for teachers of trades and industry, and agriculture, and one for their students. Thirty-one teachers and 534 students responded.

Findings. One student-related factor is absolutely essential to the feasibility of having supervised occupational experience programs. This factor is the student's willingness to take a subject if required to have a part-time job. A 78.4% response of "definitely" or "probably" for this variable was received. The differences between males and females and their "willingness to take a subject if required to have a part-time job" was found to be statistically significant at the .005 level, males being more willing than females. The fact that sixty percent of the students had part-time jobs may explain their willingness to take a subject requiring a part-time job. However, of those with part-time jobs, only 15.5% reported the use of their vocational training on the job. Vocational training has the major objective of providing students with the necessary skills to enter their chosen fields of work. Yet, only 37.2% of the students expected to use their training after graduation. Tenured teachers must be willing to accept supervised occupational experience programs for such to be added to the curriculum of schools. Three-fourths of

the teachers in the study were willing to accept such an addition. Neither subjects taught nor years of experience were related to teacher preferences in these regards. The location of training stations is necessary to conduct supervised occupational experience programs. Forty-two percent of the teachers were "definite" or "probable" in their self-perceived ability to identify a sufficient number of supervised occupational experience sites for students enrolled in their programs. An additional 39 percent indicated they "may be able to do so." Teachers must be willing and available to superise students during the summer months. Most teachers of all subjects and all years of experience were willing to work during the summer. However, teachers having 1-15 years of experience were less likely to be willing to supervise students during summer months than those with over 15 years of service. The success of a vocational program can be measured by how many of its graduates become employed in that vocation. Seventy-five percent of the teachers responded "definitely" or "probably" to employment being available for their graduates. However, 45% of the automotive teachers responded "maybe" or "doubtful" to this availablity which may indicate an over-supply of trainees in that field. From the analysis of student and teacher responses, it is concluded that it is feasible to have supervised occupational experience programs as an integral part of all vocational education programs in Montgomery County Public Schools if the local educational agency deems it appropriate and provides the necessary funds.

RIGGS, C. Larry. "A Comparison of Vocational Education in Agriculture Departments With Gold Emblem Award FFA Chapters (1972-1976) and Vocational Education in Agriculture Departments Without FFA (1977)." Master of Science Thesis, 1982, University of Maryland, College Park.

Purpose. The purpose of this study was to identify characteristics of Gold Emblem Award Future Farmers of America (FFA) chapter advisors and to compare these advisors with vocational agriculture teachers not utilizing FFA. Results were based on a sample of 184 FFA advisors who were cited for having Gold Emblem chapters for at least one year between 1972-1976 and 175 teachers without FFA chapters during 1977 in the United States.

Method. Data were collected by mail questionnaire. Chi-square was used to measure statistical significance of differences between the two groups studied.

Findings. The major findings were: (1) all of the 1972-1976 Gold Emblem Award FFA chapter advisors were male; (2) production agriculture programs had 97.8 percent of the Gold Emblem Award FFA chapters; (3) ornamental horticulture programs comprised 54.9 percent of the programs without FFA; (4) most Gold Emblem Award FFA chapters were located at a rural comprehensive high school--most departments without FFA were in suburban vocational-technical centers; (5) Gold Emblem Award FFA chapter advisors received youth group advisor training during a unit in a college course and practice teaching--less than half of the teachers without FFA received youth group advisor training; (6) over 90 percent of the Gold Emblem Award FFA chapter advisors were born and raised on a farm; and (7) most of the teachers without FFA had an agricultural related industry background.

MICHIGAN

MAHJOORY, Saiid. "The use of soil survey information by farmers in five Michigan counties." Ph.D. Thesis, 1982, Michigan State University, East Lansing.

Purpose. The primary purpose of this study was to examine the use of soil survey information by Michigan farmers and the relationship of its use to farmer and farm characterisitcs.

Method. A mail questionnaire, with cover letter, self addressed and stamped return envelops were sent to 500 farmers. The names were chosen by random based on an assigned quota of farmers in each county. In addition, directors of Cooperative Extension and Soil Conservation Districts in each of the five counties were interviewed by telephone after a list of specific questions had been mailed to them. For analysis the chi-square statistic was used. Sixty-eight variables were identified and registered on computer data coding forms. All data were punched onto fortran cards and placed into the Cyber 750 to obtain the research results.

Findings. Major findings were: (1) Farmers with larger farms and higher levels of formal education were more aware of the report, and used the report most frequently. (2) Farmers who had used reports all indicated the reports were helpful in their farming situation. (3) Farmers on large farms, younger farmers and cash crop farmers had the highest level of interest to attend soil survey report educational programs. (4) Dairy farmers preferred shorter educational sessions. (5) "Other farmers" were most frequently cited as a source of information for individuals who discussed their soil problems.

MINNESOTA

AL-HEDYANI, Abdullah Mohammed. "A Suggested Training Program For Extension Workers in Saudi Arabia." MED, 1981. The University of Minnesota, St. Paul, Minnesota.

Purpose. The problem concerning extnesion workers training in Saudi Arabia as well as in many other countries is very important.

The central purpose of the paper was (1) to identify, define and formulate a workable training program for extension workers, that might be adaptable to Saudi Arabia, (2) to identify, define the extension education concepts in the United States and other countries that might be adaptable to Saudi Arabia and (3) to identify personnel training concepts.

Method. The procedure followed in this study was to conduct an extensive review of literature related to research and opinions of specialists in the field of Agriculture and Extension Education. A series of discussions were made with some of the specialists in the Agricultural and Extension Education in the University of Minnesota in order to identify concepts of education that might be adaptable to Saudi Arabia.

Findings. Extension education would help people and local communities raise their standard of living. Agricultural extension education training programs could work toward helping people help themselves to solve the production problems involved in agriculture.

In designing a training program for extension workers in Saudi Arabia, the needs and interests of extension workers as well as the objectives of agricultural extension service must be recognized and met. An extension training program should be well organized toward concrete objectives and still be flexible. Flexible so that it meets long-term situations, short-term changes, and special emergencies.

An extension training program should be based on the rural people's needs. Where researched and scientific information along with social, cultural and economic factors are directed toward the improvement of knowledge, skills and attitudes of extension workers.

This training program should involve plans in using local resources, and available facilities. It also should be designed properly to make best use of the conditions within the country.

INGVALSON, Brian Irvin. "An Experimental Evaluation of an Instructional Packet on Supervised Occupational Experience Programs for Beginning Vocational Agriculture Students in Minnesota." PhD, 1982. Library, the University of Minnesota, Minneapolis.

Purpose. The objectives were to identify biographical characteristics and occupational and educational plans of beginning agriculture students while relating these characteristics to their performance on Supervised Occupational Experience knowledge, attitude and planning scores. These specific objectives were used in ascertaining the effectiveness of an instructional packet on supervised occupational experience program for the same students.

Method. Over 570 agriculture students from 33 randomly assigned Minnesota schools comprised the sample. A pretest-postest control group design was used. Seventeen of the schools, the teacher and his beginning vocational agriculture classes comprised the experimental group, while 16 schools were in the control group. The experimental treatment was an instructional packet designed for use by vocational agriculture teachers in assisting their beginning students to select and plan individual SOE programs. Control group teachers taught their normal instructional unit on SOE.

A student data collection instrument, an SOE attitude scale, an SOE program planning inventory and a teacher data collection instrument were developed to gather information for the study. The data were analysed with Chi-square, t-test, Pearson r. and analysis of variance and covariance.

Findings. Analysis of these data indicated the following.

1. Sixty-nine percent of the students lived on a farm.

2. Forty-five percent of the students planned to enter production agriculture while nine percent planned to pursue an agribusiness career.

3. Agriculture teachers averaged 10.3 years of experience with 9.3 years of farm experience and 1.4 years of agribusiness experience.

4. The SOE component was the basis for 12.5 percent of the course grade.

5. Inferential techniques indicated that the subsamples were homogeneous except for student grade averages which were controlled for thorough analysis of covariance procedures.

6. The dependent variable data gathering instruments were statistically sound.

7. Several significant correlations were found including "as the instructors' expectations increase, the students' attitude scores improved, and his students achieved greater FFA success."

8. The number of hours of instruction provided did not provide any significant correlations with post-test measures.

OGUNBAMERU, Bankole O. "Model For Determining The Utility of Self-Assessed Competencies In Predicting Economic Success In Dairy Enterprise Management." PhD, 1981. The University of Minnesota, St. Paul, Minnesota.

Purpose. There is a void of empirical data in the literature that critically examined the competency lists in the "National Ag Occupations Competency Study," particularly using these lists as measurement tools and comparing the results with other measures to ascertain reliability and validity of the competency lists. This study was therefore embarked upon to answer the question: Does the dairy farm manager (DFM) competency assessment list, used as a measurement instrument, measure consistently and validly enough to be useful in practical situations?

Method. The population of this study was composed of 53 DFM who enrolled in the Minnesota adult farm business management education programs and their farm management instructors (FMI) -- 13 instructors.

The DFM's rated their competency levels using the DFM competency assessment instrument. The FMI's also used the DFM competency instrument to rate the competency levels of their respective DFMs. The DFM and FMI cooperatively retrieved the DFMs farm businesss analysis data. The DFM and FMI individually completed "comment forms" on the DFM competency instruments.

Cronbach's alpha was used to estimate the internal consistency of each instrument in total and by scale. ANOVA and pearsonian r between the two instruments, by scale and total instruments, were computed to determine the concurrent validity of the instruments. The step-wise multiple regression model was used to test the predictive power of the competency measures.

Findings. The internal consistency coefficients for the DFM and FMI instruments were very high, .910 and .945 respectively. The scales' coefficients fort he DFM instrument ranged from .667 for Records to .950 for Labor. The scales' coefficients for the FMI instrument ranged from .799 for Records to .971 for Labor.

The content validity was established by the high percentages of the DFM and FMI who contended that (1) the instructions were easy to understand, 94 and 100 percent, (2) the scales were easy to understand and use, 93 and 100 percent, and (3) the items in the instruments adequately described the skills required by dairy enterprise managers, 87 and 92 percent, respectively.

The concurrent validity of the DFM and FMI instruments was demonstrated by (1) the non-significant differences between the mean ratings of the DFM competency levels by the DFM themselves and the FMI, and (2) the highly significant and positive correlation between the two competency instruments. The Personian r for the two instruments was .467.

RABIDEAU, Rick W. "A Time Utilization of Agricultural Education Graduates of The University of Minnesota Currently Employed In Selected Agribusiness Occupations." Master of Arts Colloquim Paper, 1982, University of Minnesota, St. Paul, Minnesota.

Purpose. This study was designed to: (1) determine the manner in which agricultural education graduates currently employed in agribusiness occupations utilized their working hours, and (2) identify the occupational features and benefits of various agribusiness occupations.

Method. Data were collected using a time survey form developed by the investigator. Survey forms were sent to the 63 participants during the months of May, July, September, and November. Each participant was asked to record on the survey form the amount of time they spent working in activities related to the seven job categories provided. The data collection phase consisted of randomly selected one week periods in each of the four survey months. The data was compiled, summarized and analyzed using descriptive statistics.

Findings.

1. Generally, agricultural education graduates entering agribusiness occupations can expect to work from 45 to 49 hours per week, with the majority of time being spent in travel, direct client contact and administrative duties.

2. Agribusiness professionals travel an average of 500 miles and spend one to two nights away from home each week. The data also indicated that the workloads of agribusiness professionals are extremely seasonal in nature.

3. The majority of agribusiness professionals earn salaries in the range of $19,000 to $22,000 per year, but the benefits usually included an automobile for personal use with an average value of $2,500.

4. Agribusiness professionals who had previously taught vocational agriculture missed working with students in the Future Farmers of America organization the most and the school administration the least, 86 percent indicated they would not return to teaching under current circumstances.

SCHIPULL, Martin A. "A Comparative Study of Metals and Welding Courses Taught at Upper Midwest Public Post-secondary Educational Institutions." Master of Education coordinating paper, 1981, University of Minnesota, St. Paul, Minnesota.

Purpose. The purpose of this comparative study was to determine the content of Metal and Welding courses taught in the three types of public post-secondary institutions and the transfer of credit for these courses between institutions.

Method. Two survey questionnaires were administerd to instructors of Metals and Welding courses. The first survey with 23 respondents, dealt with course content at the various institutions. The follow up survey with 22 respondents, addressed credit transfer between these institutions of Metals and Welding. Descriptive statistics was used to analyze the data while allowing for comparisons within types of institutions as well as between the types.

Findings. Similarities occurred between the types of institutions in a) hours of instruction per week, b) percentage of time allotted to class lecture and laboratory activity, c) percentage of time allocated to all the welding processes and metallurgy instructional areas, d) instructional hardware and software utilized, e) the number of instructors who had bachelors degree preparation in metals and welding, f) form of credit transfer and whether the transfer was from an instate or outstate institution, g) credit transfer of community college, state university system or university system credits and h) administration level in the institutions responsible for the credit transfer policy. Dissimilarities occurred in a) time allocated to the special welding processes instructional area, b) initial employment trends of metals and welding students, c) credit transfer of vocational technical institution metals and welding credit, by other post-secondary institutions and d) requirements for additional testing in the credit transfer policy. These findings indicate that credits in Metals and Welding courses should generally be transferable to other post-secondary institutions depending on the specifics of the program.

SHIFLET, Ron "The Relationship Between Years of Enrollment in an Adult Farm Management Program and Evaluation of that Program by Former Co-operators in the East South Central Analysis Area of Minnesota". Master of Arts Colloquium Paper, 1981, The University of Minnesota.

Purpose. The purpose of this study was to determine why former co-operators were no longer enrolled, how these former cooperators viewed the program with regard to the number of years they were enrolled, and compare these responses to responses of cooperators still enrolled in the program.

Method. One hundred former cooperators from the survey area who had dropped out within the past three years were randomly selected. Each was mailed a questionnaire similar to one used to survey currently enrolled cooperators in a previous study. Returned questionnaires were analyzed comparing their responses to responses of the currently enrolled cooperators as well as comparing their responses to each other accoarding to how long they had been enrolled.

Findings. Responses from 41 former cooperators placed expense of the program as the main reason for dropping out with another record keeping service available to them ranked second. Ninety-five percent of those responding found some benefit from the program while they were enrolled. The majority of responses between groups enrolled for different lengths of time as well as between former and currently enrolled cooperators were similar, although some areas exposed significant differences.

MISSISSIPPI

BOWEN, Blannie F.; LEE, Jasper S.; CANTRELL, M. Joy; and FRESE, Wolfgang. "A Profile of Undergraduates Enrolled in Agriculture Majors at Mississippi State University in 1977 and 1982." Staff Study, 1982, Mississippi State University, Mississippi State.

Purpose. This study was conducted to determine whether short term trends were developing regarding the characteristics of students who were pursuing agriculture majors at Mississippi State University in 1977 and 1982.

Method. A stratified random sample of students in agriculture majors at Mississippi State University was selected and surveyed during the spring of 1982. The questionnaire used in the 1982 survey was developed and used during a 1977 Southern Region study of students in agriculture majors. The 1977 comparison data for Mississippi State University students were collected during the regional study.

Findings. Data from the two measurement periods indicate that: (1) the number of married students in agriculture majors dropped by almost 10 percent, (2) the number of students who had graduated from public high schools decreased from 68 to 57 percent, (3) when compared with 11 other individuals, vocational agriculture teachers and Extension agents had little influence on the decision of the students to select agriculture majors, and (4) the number of students with 4-H experience dropped from 44 to 24 percent while the number with FFA experience increased slightly from 20 to 25 percent.

MISSOURI

LARKE, Alvin, Jr. "Assessment and Evaluation of the Curriculum and Other Academic Requirements of an Undergraduate Agronomy Program in a Major Land Grant University," Ph.D. dissertation, 1982, University of Missouri-Columbia.

Purpose. The purposes of this study were to determine the competencies that are performed by agronomy graduates and how important it is that they be competent in various areas as perceived by both the graduates and their employers, to determine whether or not employers perceive the importance of employee competence differently than the agronomy graduates and whether or not the level of competence and selected demographic variables are related.

Method. The population consisted of 210 graduates of the Agronomy Department at the University of Missouri-Columbia and 152 employers of the graduates. The instruments used in the study were the Agronomy Graduate Instrument and the Agronomy Graduate Employers' Instrument.

Findings. The findings of this study are summarized as follows: (1) Most of the agronomy graduates were found to place the importance of being able to perform a particular competency in the upper range. (2) Agronomy graduates and employers have similar perceptions of the importance of competencies needed in the various occupations. (3) Agronomy graduates with different farm backgrounds will possess different levels of competence and the agronomy department should attempt to provide internship or work study programs to enhance the graduates' level of competence. (4) The agronomy graduates possess a fair or above level of competence in their performance of selected competencies.

MORTON, Craig H. "Effects of the Use of the Guided-Bend Weld Test on Attainment of Selected Arc and MIG Welding Competencies," Ph.D. dissertation, 1982, University of Missouri-Columbia.

Purpose. The purpose of this study was to analyze the effectiveness of the guided-bend weld test on attainment of selected arc and MIG welding competencies.

Method. The population for the study included individuals enrolled in Agricultural Engineering 20, Welding, at the University of Missouri-Columbia and the sample consisted of students enrolled in two sections of the course for the fall semester, 1981. Treatment groups were segregated by section to provide control, with the experimental group receiving instruction that included feedback provided by the guided-bend weld test and the control group receiving feedback through visual observation. Following a pretest, students practice welded eight joints in each of the three positions utilizing the arc process and also executed these practice exercises with the MIG process. After all practice welding was completed, all students were administered a post test. All pretest and post test weld specimens were subjected to a face-bend test and a root-bend test scored by each of three weld judges.

Findings. (1) The guided-bend weld test, as used in this study, does not in itself produce the quality feedback that would be necessary to significantly improve the quality of arc and MIG welding. (2) The MIG welding process provides the student with an easier method of producing quality welds.

WALTZ, Freddie C. "Factors Influencing the Tenure of Vocational Agriculture Teachers in Missouri," Ph.D. dissertation, 1982, University of Missouri-Columbia.

Purpose. The purposes of this study were to ascertain which of the selected factors have contributed to the teacher turnover rate and tenure of vocational agriculture teachers in Missouri and to provide a broader data base to assist the agricultural education staff in program evaluation and long range program planning and modification.

Method. The population consisted of 290 agricultural education graduates from the University of Missouri-Columbia between 1972 and 1979 who were certified to teach vocational agriculture in Missouri. The instruments used were the Teacher Survey and the Non-teaching Graduate Survey.

Findings. (1) The availability of supplemental income had little influence on the teachers decision to continue teaching vocational agriculture or to quit. (2) The pre-college agricultural experiences of the graduates were very similar in all aspects studied. (3) Teachers accumulated more college credits beyond the undergraduate degree and attended more in-service credit courses than did the graduates who taught and quit. (4) The marital status of graduates and the employment status of spouses were similar between the two groups.

MONTANA

SHELHAMER, C. Van "Coexistence of Vocational Agriculture and Industrial Education in Montana". Funded by Vocational Services, Office of Public Instruction, Helena, Montana, 1982, Montana State University, Bozeman.

Purpose. The purpose of the study was to identify the problems created by Montana high schools offering vocational agriculture and industrial education in the same shop facility. Also, guidelines were to be developed which would help eliminate identified problems.

Methods. A four-page survey instrument was developed, tested for clarity, and its ability to determine if teachers and administrators philosophy guiding these programs was vocational or industrial education. Twelve of the sixteen statements allowed the researcher, with 95 percent confidence, to determine if the guide philosophy was vocational or industrial education. The validated survey instrument was used to gather data from 20 vocational agriculture teachers, 26 industrial arts teachers and 20 high school administrators. Frequencies and F ratios were computed on the resulting data as required to satisfy the objectives of the study. An Ad Hoc Committee was utilized to study the identified problems in more detail and to develop helpful guidelines.

Findings. The major findings of the study are: (1) There is no statistical difference in the philosophies used by vocational agriculture teachers, industrial educators and high school administrators in developing the vocational agriculture and industrial education programs included in this study. As a result, the vocational agriculture programs included in this study could be considered to be non-vocational. (2) Lack of communication between teachers is the major factor causing the identified problems. (3) Other major factors causing problems were; the size of the shop; the use, care and maintenance of equipment and tools; the failure to identify the educational needs of the community; the scheduling of classes and the activities within the facility; competition for students; and budgeting problems. (4) The school system itself, as well as state guidelines, can cause educational conflict in local programs.

(5) The method of instruction used by the teacher can create or eliminate the need of shop space and equipment, thereby, increasing or decreasing the amount of educational conflict. (6) Programs generally don't have written instructional goals and objectives that they follow. (7) As a group, administrators do not understand the difference between the two programs.

A set of written guidelines were developed in an attempt to reduce the problems created by coexistence.

SHELHAMER, C. Van "Impact of Agriculture Mechanics Inservice Training on Montana Vocational Agriculture Programs." PhD Dissertation, 1982, Colorado State University, Fort Collins.

Purpose. The purpose of the study was to determine the impact of three years of Agriculture Mechanics Inservice Training on Montana vocational agriculture programs. To accomplish the purpose, the following objectives were utilized to direct the study: (1) Determine the extent and time of change in curriculum organization, instructional material usage, instructional methods, and time allocations as a result of inservice training in mechanics. (2) Determine the impact of inservice training techniques in bringing about changes in Montana's vocational agriculture programs. (3) Determine the effectiveness of inservice training when compared to other selected activities in bringing about change in Montana's vocational agriculture programs.

Method. A four-page questionnaire was developed, tested for face validity, and used to gather data from 46 Montana vocational agriculture teachers. One hundred percent of the population returned the questionnaires. Frequencies and t scores were computed on the resulting data as required to satisfy the objectives of the study.

Findings. The major findings included: (1) Inservice training in agriculture mechanics can and does influence what Montana's vocational agriculture teachers teach in their mechanics programs. Generally inservice training will result in major instructional changes within instructional topics. (2) Inservice training in agriculture mechanics will result in major changes in instructional units taught, curriculum organization, instructional methods, or time allocated to an instructional topic. (3) Instructional techniques used during inservice training will influence the instructional technology used by vocational agriculture teachers. (4) Vocational agriculture teachers in Montana are likely to incorporate the agriculture mechanics inservice training into their programs within one year of the training session. (5) Teachers who chose not to participate in inservice training on mechanics indicated that Future Farmers of America Agriculture Mechanics Contests have more influence on their mechanics curriculum than do teachers who participate in inservice training. (6) Changes in teaching techniques can result from inservice education in a technical area.

SULLIVAN, Jerald, B. "Farmer and Rancher Use of the Montana Cooperative Extension Service." Master of Science Professional Paper, 1982, Montana State University, Bozeman.

Purpose. The purpose of this study was to determine the factors associated with farmers/ranchers using the Montana Cooperative Extension Service as a source of agricultural information and to further try to associate this with farm/ranch size.

Method. Twelve hundred fifteen farmers and ranchers, approximately 5% of the total number of producers in Montana were randomly selected from county lists. Approximately 24% returned the questionnaire. Telephone calls yielded some additional questionnaires.

Findings. Major findings include: (1) Small scale farmers attend fewer information meetings; (2) No great difference between small scale farmers and large scale farmers in the number of contacts; (3) The greatest number of contacts are made in the spring of the year; (4) Producers felt the extension agents do not make enough on-farm visits; and (5) Producers in general find the extension service is reliable and trustworthy.

NEW YORK

BUCKHOUT, Carol Z. "Feeding Dairy Cattle: A Teaching Manual." Master of Professional Studies Project, 1982, Cornell University, Ithaca.

Purpose. The purpose of this project was to provide information and educational tools necessary to teach students about dairy cattle nutrition. Its major focus was aimed at teachers of agriculture at the high school level. A major portion of the project is applicable to teachers at the post-secondary level, teachers of adult education courses and to Cooperative Extension agents.

Method. The need for instructional materials in the area of dairy nutrition had been identified by numerous teachers of agriculture. An easy-to-read format was selected and six units were developed according to the logical progression that might be followed when teaching this topic. Field testing by teachers of agriculture, a Cooperative Extension agent and 20 students at Morrisville Agricultural and Technical College provided input for changes or additions.

Product. A 288 page teachers' manual was developed containing six units with the following format: overview, objectives, suggested teaching strategies, basic vocabulary list, advanced vocabulary list, content outline, content, transparency masters, discussion questions, student quizzes and unit resources. The beginning three units contain basic information on nutritional concepts and requirements of dairy cattle. The latter three units build upon this information stressing practical applications of feeding and managing different classes of dairy animals. Price: $10.00. Available from: Instructional Materials Service, Stone Hall, Cornell University, Ithaca, New York, 14853.

CHOOMNOOM, Siripan. "Identification and Utilization of Local Data for Planning Vocational Education in Thailand." Doctor of Philosophy Project, 1983, Cornell University, Ithaca.

Purpose. The primary purpose of this study was to develop a better understanding of the present uses and limitations of local data in vocational education planning in Thailand and the factors and forces influencing these uses and limitations.

Method. A total of 140 directors of vocational, technical, and agricultural institutions under the administration of the Vocational Education Department in Thailand were included in the study. Data were obtained through a distributed questionnaire. In addition, 15 top government officials who directly engage in the vocational-technical education planning were interviewed. The data were analyzed through the use of frequency distributions, percentage breakdowns, and chi-square tests.

Findings. It was found that: (1) Socioeconomic-political context data and manpower demand data are not readily available at both the local and central levels. These two types of data are also not used frequently in the planning process at both levels. It is important that the overall process of planning be improved if these two types of data are to be used in planning. (2) Both local and central planners clearly indicated that they rely heavily on social demand and resources-constraints data in planning. It is suggested that in order to obtain a balance in the use of each type of data for planning both central and local planners should be made aware of the importance of all types of data. (3) Apparently the data which can be most easily obtained through school records, i.e., social demand data and resources-constraints data, are more readily available and used more often in planning than community-related data, i.e., socioeconomic-political context and manpower demand data. These findings suggest that staff skills in conducting community surveys and in cooperation and coordinating effectively with other local agencies should be developed. (4) The characteristics which described the directors and their institutions do not appear to have any statistically significant relationships with an aggregate index of the use of data. These findings indicate that the ways the data are used are dictated by deficiencies within the planning process as well as some characteristics of the planners. It is suggested that improvement of the planning process itself as well as the skills of the planners needs to be encouraged.

COREY, Carleton R. III. "Poinsettia Production." Master of Professional Studies Project, 1982, Cornell University, Ithaca, New York.

Purpose. The purpose of this project was to provide a slide/script on poinsettia production for use by agricultural teachers at the secondary level.

Method. The procedures used were: (a) gathering and reviewing of research reports and materials, (b) selecting and writing the main topics of production information to be addressed, (c) writing the script and taking/obtaining the slides, (d) review of the script and slides by project technical consultants, (e) revisions based on comments and suggestions, and (f) final copies of the script/slides were produced and offered for sale through the Cornell Instructional Materials Service.

Findings. The ajor finding was the development of a script/ slide set on poinsettia oduction covering the history, and pinched and unpinched methods of pro ction including photoperiod and temperature require- ments, disease and pest ntrol procedures, fertilization and growth retard- ants. The last 12 slide show the development of the ANNETTE HEGG poinsettia variety grown unpinched ing one cutting.

LORD, Christin E. "Manure Management." Master of Professional Studies Project, 1982, C ell University, Ithaca, New York.

Purpose. The rpose of the project was to provide a comprehensive teaching package on manu management for use by agricultural teachers at the secondary level. The pr ect also includes instructional aids to help the teacher enhance student arning.

Method. The p cedures used were: (a) gathering and reviewing of research reports and mat ials, (b) selecting and writing the main topics of information to be covere (c) selecting and writing the instructional aids, (d) field testing the pu ication, (e) revising the publication based on the comments and suggestions and (f) final copies of the publication were produced and are offered for sale hrough the Cornell Instructional Materials Service.

Findings. Maj findings include: (a) the development of a teach- ing package on manure ma gement divided into five units: Factors in Planning, Manure Characteristics, ndling and Transfer to Storage, Storing and Spread- ing Manure, and Land App cation, and (b) instructional aids for the teacher for each unit; unit intr uction, performance objectives, terminology, teacher information, unit revie heet, suggested student activities, unit evaluation, unit exam, answer keys, d where applicable, overhead transparency master.

RADFORD, Loren . "The Green Pages: A Conservation Resource Directory for New York S te." Master of Professional Studies Project, 1982, Cornell University, Itha , New York.

Purpose. The rpose of the project was to develop a comprehensive directory of resources (encies, facilities, materials, etc.) available to conservation educators i New York State. The directory lists professional, public, industrial, and vernmental organizations at national, state and local levels. It also lists e cational institutions offering conservation related degrees, nature centers, rboreta, conservation related occupational titles, and free or inexpensive ucational material available.

Method. The p cedures used were: (a) identifying organizations and data of importance t conservation educators from existing directories; (b) validating informati on organizations through correspondence and personal contacts; (c) obtaining formation from selected organizations on educational material available; (d) cording all data on microcomputer diskettes (editing and hand copy printing w accomplished through use of an editing program); and (e) final copies of e directory were produced and are offered for sale through the Cornell Inst ctional Materials Service.

Findings. Major findings include: (a) the development of the first comprehensive directory for conservation educators in New York State; and (b) the development of a system for recording and entering data that will facilitate updating and revising the directory in the future.

SMITH, William Manley. "A Study to Develop a Model Curriculum in Agricultural Education for Secondary Schools in Jamaica. Doctor of Philosophy Dissertation, 1982, Cornell University, Ithaca, New York.

Purpose. The primary purpose of the study was to develop a model curriculum in agricultural education for secondary schools in Jamaica using data collected from selected Jamaicans and appropriate documents.

Method. Appropriate government and educational documents were reviewed to ascertain the nature and extent of development of current national policy and program for agricultural education. Questionnaires were distributed to 298 educators and agricultural extension personnel to determine their perceptions regarding the kind of agricultural education program that would be best suited for Jamaica. The data were analyzed for frequency of response and differences in response between and within certain survey groups using the SPSS and one-way analysis of variance test respectively.

Finding. It was found that: (1) National policies governing agricultural education are concerned with the major focus of programs in the different kinds of secondary schools and the coordination of the various training systems to avoid duplication of effort. (2) The national plan for agricultural education is embedded in the government's plan for secondary education and the goals, objectives and strategies for agricultural education. Together they focus on aspects of program development and implementation including: (a) awakening and guiding students toward agricultural careers and becoming agriculturally informed citizens; (b) developing a program to meet national goals for increasing food production and improving the standard of living of rural people; (c) training students to make a living self- or paid-employed in agriculture and allied service; (d) providing facilities and equipment for adequate provision of technical/vocational studies; and (e) providing for supervision, curriculum development and teacher training in technical/vocational areas. (3) Majority of the educators responded favorably and showed little difference of opinion regarding the purpose, type and nature of an ideal agricultural education program. And also, the activities, materials, facilities and time that would be adequate for implementing such a program. (4) Ninety-one percent of the 133 content items presented were rated either important or very important for inclusion in an ideal agricultural education program by the educators who responded to those items.

NORTH CAROLINA

GHATTAN, Akbar. "Problems Involved in Mechanization of Rice Production in Iran." Master of Science Thesis, 1982, North Carolina Agricultural and Technical State University, Greensboro.

Purpose. The purpose of this study was to identify problems and offer suggestions which may solve some of the difficulties of rice growing in Iran.

Method. A modified Likert Scale was used to obtain the opinions of twenty North Carolina Agricultural and Technical State University Agricultural Engineering students and five faculty members concerning the problems involved in the mechanization of rice production in Iran. Student participants voiced their opinions about each of the fifty-one (51) statements by indicating whether or not they (1) agreed; (2) disagreed, or (3) were undecided about the question.

Findings. The participants indicated their opinions concerning (1) The advantages for having power machinery; (2) the disadvantages for having power machinery; (3) the effects of irrigation; (4) the socio-economic status of rice production mechanization; and (5) the proposed programs and activities that may be implemented.

Major findings include: (1) That power machinery should be used to replace traditional growing methods; (2) that agricultural education and extension services should be introduced; (3) that Educational Service Centers should be established to teach machinery care, repair, and operation.

NORTH DAKOTA

BACKLUND, Paul A. "An Assessment of Selected North Dakota Vocational Agriculture Curriculum Materials." Master of Science Colloquium Paper, 1982, North Dakota State University, Fargo.

Purpose. The purpose of this study was to assess vocational agriculture instructors' use of and satisfaction with curriculum materials developed by the Department of Agricultural Education at North Dakota State University from 1979 through 1980.

Method. A survey questionnaire was used to obtain data for the study. The questionnaire was mailed to 87 secondary vocational agriculture departments in the state with a follow-up mailed to non-respondents. A 65.5 percent response was received after the two mailings. Beginning instructor responses were totaled separately for some of the data.

Findings. A majority of the respondents used or intended to use the curriculum materials with beginning teachers using them to a somewhat higher degree. Instructors with more than seven years experience used the materials slightly more than instructors with three to seven years teaching experience. All instructional units received an average rating of good or better. Format and content of the instructional units were generally accepted with no major changes seen as necessary. Comments by respondents regarding the project were nearly all favorable.

CLARK, Glenolin H. "North Dakota Agribusiness Employment Opportunities and Training Needs Within the Agricultural Finance and Livestock Marketing Industries." Master of Science Colloquium Paper, 1982, North Dakota State University, Fargo.

Purpose. The purpose of this study was to determine the extent of agricultural employment in two North Dakota agribusiness industries. Specific objectives of the study were to determine: 1) the agricultural finance and livestock marketing industries and occupations in North Dakota; 2) the number of full-time and part-time employees and their occupational distribution; 3) the employee replacement needs; 4) projected employment needs; 5) the education and work experience desired by employers for specific occupations; and 6) the number of employees requiring agricultural abilities in each occupation.

Method. Direct mail questionnaires were developed and mailed to the agricultural finance and livestock marketing businesses in North Dakota. The agricultural finance study included banks, Production Credit Associations, Farmers Home Administration and Federal Land Banks. The livestock marketing study required two questionnaires. One was sent to the livestock auction marketing agencies and the other to all other ogencies and individuals bonded by the North Dakota Department of Agriculture. Two follow-up mailings were used to improve the response rate for all questionnaires.

Occupations were identified along with the education and prior work experience desired by employers for each occupation. Employment projections were obtained for a five-year period and annual replacement needs were estimated.

Findings. The full-time employment within the agricultural finance industry is expected to increase slightly through 1985, while part-time employment is expected to decrease. The educational training preferred by the financial institutions for each occupational title indicated the agricultural representative and upper level management positions usually required a four-year college degree. Employers preferred a high school education for the majority of other occupations. The respondents preferred less than two years of work experience for most occupations; only upper level management positions required more than two years.

Employment in the livestock marketing industry is expected to remain relatively stable through 1985. For most occupations employers preferred at least a general high school education and fewer than two years of livestock marketing experience.

LIEBERSBACH, Albert J. "Attitudes of North Dakota High School Administrators Toward Selected Aspects of Future Farmers of America Programs." Master of Science Colloquium Paper, 1982, North Dakota State University, Fargo.

Purpose. The major purpose of the study was to determine the level of agreement with selected aspects of Future Farmers of America programs, and rating of the educational value of selected FFA activities by North Dakota school superintendents, principals and vocational directors who administered vocational agriculture programs in the state of North Dakota.

Method. A direct mail questionnaire was sent in January of 1982 to 176 North Dakota school administrators having responsibility for vocational agriculture programs. This group included superintendents, principals and vocational directors. Attitudes towards selected aspects of Future Farmers of America programs were measured using a Likert scale. Respondents also rated the educational value of selected FFA activities. Responses of these groups of administrators were compared.

Findings. Administrators responded to twenty-three selected concept statements. They responded in the agree to strongly agree area for 10 of the statements, undecided to agree for 8 and undecided to disagree for the other 5 statements. The administrators also rated twenty-three local, district, state and national FFA activities as to their educational value. The rated 16 of the activities above 3.5 where 5 = very high value, 4 = high value and 3 = average value. Generally local activities were rated higher than district, state or national activities. The administrator groups tended to agree closely in their responses to both the concept statements and the activity ratings.

WILLARDSEN, Ronald L. "Attitudes of North Dakota School Administrators Toward Supervised Occupational Experience Programs in Vocational Agriculture." Master of Science Colloquium Paper, 1982, North Dakota State University, Fargo.

Purpose. The major purpose of the study was to determine the level of agreement with basic educational concepts and willingness to support selected aspects of Supervised Occupational Experience Programs by North Dakota school superintendents, principals, and vocational directors who administer vocational agriculture programs in the State of North Dakota.

Method. A direct mail questionnaire was sent in November of 1980 to 165 North Dakota school administrators having responsibility for vocational agriculture programs. This group included principals, superintendents, and vocational directors. Attitudes toward selected educational concepts of Supervised Occupational Experience programs were measured using a Likert scale. Respondents also indicated their willingness to support selected aspects of Supervised Occupational Experience programs in vocational agriculture. Responses of superintendents and principals were also compared on the basis of length of service as an administrator of vocational agriculture programs.

Findings. Administrators responded to seventeen selected concept statements concerning Supervised Occupational Experience programs. Six of these statements were rated in the agree to strongly agree range and nine in the undecided to agree range. Two statements were rated between undecided and disagree. Eight other statements were designed to measure willingness to support Supervised Occupational Experience Programs. Respondents rated only one of these in the agree to strongly agree range. Vocational directors tended to be more supportive than the other administrator groups. Superintendents and principals tended to be in agreement with each other in both the concepts and support statements.

WITT, Marvin J. "The Perceptions That North Dakota School Superintendents and Vocational Agriculture Teachers Have Toward the Summer Programs In Vocational Agriculture." Master of Science Colloquium Paper, 1982, North Dakota State University, Fargo.

Purpose. The major purpose of this study was to determine the perceptions that North Dakota school superintendents and vocational agriculture teachers have toward the summer programs in vocational agriculture.

Method. The survey questionnaire was developed and pilot tested on a sample group of North Dakota superintendents and vocational agriculture teachers. The completed questionnaire was mailed to 83 vocational agricultural teachers who were employed as of September 1, 1980 and September 1, 1981. Superintendents employed in the same school district as the teachers were also asked to complete a questionnaire. After an additional mailing and a post card reminder, 87.9 percent of the vocational agriculture teachers and 92.8 percent of the superintendents returned completed questionnaires.

Findings: Teachers and superintendents agreed quite closely on the rated value of activities carried out by vocational agriculture teachers in their summer programs. Superintendents felt curriculum development at the local level and public relations with local business firms in the community are the most importnat activities and are activities in which their vocational agriculture teachers should participate; while vocational agricultue teachers felt the State FFA Convention held each June in Fargo was the most important activity in which they should participate, but supervised occupational experience visits accounted for the largest amount of time spent by them.

OHIO

ANDERSON, Monte R. "A Paradigm to Determine the Perceived Educational Needs of Agribusiness Employees in Clark and Fayette Counties, Ohio." Ph. D. Dissertation, 1982, The Ohio State University, Columbus.

Purpose. The purpose of the study was to develop and test a paradigm to determine the perceived educational needs of agribusiness employees.

Method. This study was descriptive and surveyed the educational needs of fifty-two agribusiness employers and 250 agribusiness employees in Clark and Fayette Counties, Ohio.

Findings. Employees and employers perceived a need for agribusiness employees to participate in additional education. Both groups of subjects preferred the employers as a delivery system for additional education, and least preferred the cooperative extension service as a delivery system. The educational needs of the employees, as perceived by employees and employers, were not significantly different when the effects of some demographic variables were held constant. The employees perceived greater educational need than the employers when the effects of type of work were held constant. Employees and employers (participants) with two-year associate degrees perceived significantly greater educational needs than participants with degrees in veterinary medicine, masters degrees and secondary education. The perceived educational needs of male participants were significantly greater than the perceived educational needs of female employees. Perceptions held by professional and skilled participants were significantly greater than unskilled participants. The perceived educational needs of employees in large agribusinesses were significantly greater than in medium and small sized businesses. Participants in agricultural mechanics and agricultural supplies and services perceived significantly greater educational needs than participants in horticulture and agricultural products. The data revealed a trend that participants under the age of forty had greater perceived educational needs than those over forty.

CUNDIFF, Rosemarie. "Teacher Tolerance of Misbehavior and Its Relationship to Teacher Traits and Disciplinary Effectiveness." Ph.D. Dissertation, 1982, The Ohio State University, Columbus.

Purpose. The purpose of this study was to measure vocational high school teachers' tolerance of disruptive behavior and to determine the relationships of teacher tolerance to selected teacher traits and disciplinary effectiveness ratings.

Method. Ratings were provided by the teachers, students, local supervisor and building directors. The population included 164 vocational high school teachers from two schools in western Ohio. All tolerance instruments were developed by the researcher. The Teacher Reaction Profile was administered to teachers and their spouses or close friends. Specifically, the instrument measured tolerance of life events. The Classroom Observation Checklist was used to measure frequency, bothersomeness and teacher tolerance of a specific list of classroom misbehaviors. The Checklist was administered to all teachers and to 2,888 students.

A Q-sort procedure was utilized, whereby the administrators placed each teacher into one of three disciplinary effectiveness categories: above average, average, below average. Teachers provided a self-rating of disciplinary effectiveness, and students also rated their teachers' disciplinary effectiveness.

Findings. An analysis of the data revealed low relationships between teacher tolerance of life events scores and measures of disciplinary effectiveness. Low relationships were also found between teacher tolerance of misbehavior scores, as perceived by the teachers, and disciplinary effectiveness ratings. Moderate to substantial relationships were found between teacher tolerance of misbehavior scores, as perceived by students, and disciplinary effectiveness ratings. Low relationships existed between teacher demographic variables and teacher tolerance scores. Low relationships were also found between teacher demographic variables and disciplinary effectiveness ratings.

FISHER, Christine M. "Participants in the 4-H Junior Leadership Program: Their Characteristics, Attitudes, and Experiences." Master of Science Thesis, 1982, The Ohio State University, Columbus.

Purpose. The purpose of this study was to describe the characteristics, attitudes and perceptions of Ohio Junior Leaders about the Junior Leadership program.

Method. Junior Leaders from 10 counties in Ohio participated in the study. A mail questionnaire was used to collect data. Response rate was 72.8%.

Findings. The most valuable leadership activities were found to be helping with Junior Fair activities, teaching younger 4-H members and being a camp counselor.

Respondents ranked the most important purpose of Junior Leadership to be to learn to lead groups and secondly, to meet people and friends.

The areas of training which respondents believed they needed most were how to motivate 4-H members to participate, how to recruit new members and styles and concepts of leadership.

The type of recognition that respondents indicated they would like to receive was certificates, plaques, or trophies. Recognition by advisors and 4-H agents was also desired.

The Pearson product-moment coefficients of correlation between characteristics of Junior Leaders and participation, value of participation, and training needed variables indicated the following: the more years respondents had been in 4-H and in Junior Leadership, the higher their level of participation in activities; the more years they had participated in 4-H and in Junior Leadership the more valuable they rated their experiences to be; and the more years they had been in 4-H and in Junior Leadership the less training they believed they needed.

HILLIKER, S. Alden. "The Relationship of Type of Orientation Program to the Performance and Job Satisfaction of Beginning County Extension Agents." Ph.D. Dissertation, 1982, The Ohio State University, Columbus.

Purpose. Every beginning County Extension Agent needs an adequate orientation to the Cooperative Extension Service in general and to the job in particular. The purpose of the study was to determine the relationship of type of orientation program and other factors to the performance and job satisfaction of beginning County Extension Agents.

Method. The population for the study was comprised of new County Extension Agents from eight Southern states (Arkansas, Kentucky, Louisiana, Mississippi, South Carolina, Tennessee, Texas and Virginia). A questionnaire was mailed to a fifty-percent stratified (by state) random sample of agents hired during fiscal year 1980. A second questionnaire was mailed to the supervisors of the selected agents. Responses were received from 120 new agents and 116 supervisors for response rates of 95.2% and 92.1%, respectively.

Findings. Five types of orientation programs were identified. Agent ratings of the effectiveness of the components of their orientation were highest for help received from another agent in the county, and lowest for programmed learning materials.

Significant relationships were found between performance and 1) the apprenticeship orientation program, and 2) agent relationships with clientele. Job satisfaction was found to be significantly related to 1) evaluation of total orientation experience, 2) relationships with professionals and 3) relationships with clientele.

It was concluded that the informal organization is more important to the orientation of beginning County Extension Agents than had been previously recognized. The new agents relied upon and gave high ratings to the help received from agents from other counties and clientele/lay leaders, even though these groups are frequently not recognized as sources of orientation training.

KNIGHT, James. A., KOUZEKANANI, Kamiar, and LEE, Lynn E. "Factors Contributing to the Enrollment of Males in Program Areas Not Traditional for Their Sex at the Secondary Vocational Education Level in Ohio." Staff Research, 1982, The Ohio State University, Columbus.

Purpose. The purpose of this research was to identify factors contributing to the enrollment of males in program areas not traditional for their sex at the secondary vocational education level in Ohio.

Method. The purposefully selected sample of the study included 18 top programs according to the number of males enrolled in 13 different educational institutions in Ohio. The instrument of this study was comprised of different interview schedules for students, teachers, counselors, and administrators. The interview schedules were tested for their content validity, reliability, and utility. The male students present on the day of interviews

teachers of the programs, and counselors and administrators of the schools (as made available by the schools) were interviewed.

Findings. Twenty-eight vocational programs were found to be not traditional for males in Ohio.

Conclusions included: 1) The students interviewed were generally found to be satisfied with what they were doing. 2) There were a few students who believed that they were misinformed about the content of certain programs. 3) Nearly half of the students interviewed believed that they would get appropriate jobs which would provide them with some form of self-satisfaction; that they would be doing what they wished to accomplish; and that they would receive ample rewards in the form of money and other benefits. 4) A mutual relationship between teachers and counselors was found to be crucial; teachers should provide counselors with accurate and objective information about their programs and counselors should utilize the informational inputs while recruiting new students. 5) Role models and audio-visual, instruction and orientation materials that include representation of males were found as being useful and significant factors in the recruitment, retention, and placement of male students in non-traditional programs.

MANNEH, Baboucar. "The Role of the Extension Aids Unit of the Ministry of Agriculture, Gambia, for Project Support Communication." Master of Science Thesis, 1982, The Ohio State University, Columbus.

Purpose. The purpose of the study was to develop a plan of action that the Extension Aids Unit of the Ministry of Agriculture in The Gambia can adopt in order to perform its communication task more effectively.

Method. The study was a library research and the literature was reviewed as it pertains to communication and its application to planned change.

Findings. The major conclusion is that the project support approach to communication is more effective than the wholesale approach. The project-support approach requires conducting context analysis in order to formulate a communication strategy. Context analysis can enhance the effectiveness of this communication strategy through the establishment of source creditability, building rapport, and identifying common meanings of messages between the communicator and his/her audience.

The Extension Aids Unit can conduct audience analysis, organize rural radio clubs, train extension agents in communication techniques, make films, slides, and other visual aids, and bring about linkage of ideas in the messages of the different development agencies.

McCRACKEN, J. David. "Agricultural Education" in the Encyclopedia of Educational Research, 5th edition, New York: Macmillan and Free Press, 1982, Staff Study.

Purpose. A critical synthesis and interpretation of reported

research in agricultural education for use by students, professionals in education, and thoughtful inquirers from fields outside of education.

Method. Eighty-eight reports of research were selected and reviewed. Emphasis was placed on studies that illustrated research issues and areas that have been of concern to the profession. Issues were grouped by the categories of: philosophy and objectives, research issues, curriculum development, program components, teacher tenure, planning and management, and evaluation. Recommendations were made for research in each of the categories.

Findings. Selected findings follow: (1) There remains considerable debate concerning the extent to which vocational agriculture should be job-specific, (2) programmatic research conducted over time by senior members of the profession is needed, (3) few additional competency studies are needed, (4) the extent curriculum content should be based upon local needs vs. a statewide core remains a subject of debate, (5) considerable study of supervised occupational experiences is warranted, (6) research relating to the FFA has been descriptive in nature and nontheoretical in emphasis, (7) the value added by summer programs is worthy of study and (8) several fruitful areas of research exist in post-secondary education.

McCRACKEN, J. David. "Research in Agricultural Education." Section Two in the Annual Review of Research in Vocational Education, Vol. 2, Champaign: University of Illinois, Office of Vocational Education Research, 1982, Staff Study.

Purpose. A "state of the art" picture of research in agricultural education and models of high-quality research.

Method. A review of 61 research studies in agricultural education was conducted. Four studies were selected to represent diversity in method and topic and to serve as models for other researchers. The four studies were synthesized and an overall summary prepared.

Findings. The four studies were (1) Gary E. Briers and David L. Williams, Research procedures for assessing the effectiveness of instructional materials for vocational education, Journal of Vocational Education Research, Summer 1979 IV (3), 41-55; (2) Gary E. Moore and Ralph E. Bender, Teaching Effectiveness of Two Groups of Beginning Teachers of Agriculture, Columbus: The Ohio State University, Department of Agricultural Education, 1976; (3) George H. Copa, Assessing the Employment and Further Education Effects of Secondary Vocational Agriculture Programs, paper presented to the Central States Research Conference in Agricultural Education, July 13, 1980, Kansas City, MO.; and (4) Harold R. Cushman and Frederick K. Tom, The Cornell diagnostic observation and reporting system for student description of college teaching, NACTA Journal, March 1976, 10-15. Briers and Williams conducted an experiment exhibiting an exemplary procedure for establishing the creditability of instruments. Moore and Bender conducted a quasi-experimental study on teacher effectiveness. Copa conducted a philosophically sound follow-up study; and Cushman and Tom conducted a study that has had great impact upon the practice of college teaching.

MILLER, Larry E. and HEDGES, Lowell E. "Exemplary Program Policies and Practices for Adult Vocational Education." Staff Study, 1982, The Ohio State University, Columbus.

Purpose. The purpose of this study was to describe the policies and procedures that have been followed by the exemplary adult vocational education programs in Ohio. Recommendations were formulated to assist in developing more effective Ohio adult vocational education programs. The objectives were to describe the school-wide aspects, the specific programs and innovative practices followed by Ohio exemplary vocational education adult programs.

Method. Five exemplary programs in Ohio were selected by an advisory council using a set of criteria. Within each district, data were gathered from administrators, counselors, instructors, students and employers. Quantitative and qualitative data were collected through reliable and valid questionnaires and interview schedules. Data analysis was descriptive in nature and presented a case-by-case summary of each exemplary program. A synopsis of commonalities and disparities between and among the exemplary programs was prepared.

Findings. Thirty-five findings were reported that describe the school-wide and program specific policies and procedures which were followed by the innovative programs. Twenty-two recommendations were made which have implications as serving as a model of policies and practices by programs seeking improvement, or to become exemplary.

NEFF, Philip A. "Personality Types of Vocational Agriculture Students in Comprehensive High Schools and in Joint Vocational Schools in Ohio." Master of Science Thesis, 1982, The Ohio State University, Columbus.

Purpose. The study sought answers to the following questions: (1) What are the personality types of vocational agriculture students in Ohio and what relationships exist between personality types and selected variables? (2) Is there a relationship between personality type and type of school attended?

Method. Three joint vocational schools and nine comprehensive high schools were randomly selected (n=202 students). The Myers-Briggs Type Indicator Form G and a demographic information sheet were administered in the home schools. The instruments were handscored and data were analyzed using SAS-Statistical Analysis System.

The MBTI measures personality preferences on four indices: Extroversion-Introversion; Sensing-Intuition; Thinking-Feeling; and Judging-Perceptive.

Findings. Senior vocational agriculture students were found to be slightly Extroverted, mildly Sensing, mildly Thinking, and mildly Perceptive. Joint vocational school students were found to be slightly more Introverted than comprehensive high school students. Relationships were discovered between: (1) participation in school and community activities and Extroversion;

and (2) being male and thinking index score. Duncan's test indicated significant differences between places of residence and personality type indices, attendance at church services and personality type indices, age rank within the family and personality type indices, and occupational plans and personality type indices.

OSBORNE, Edward W. "Livestock Skills Taught in Vocational Agriculture Classes and Possessed by Current and Prospective Ohio Agricultural Production Teachers." Ph.D. Dissertation, 1982, The Ohio State University, Columbus.

Purpose. The purpose of this study was to determine the livestock skills possessed by current and prospective Ohio agricultural production teachers and to examine the extent to which livestock skills were taught in high school vocational agriculture classes.

Method. One target population included Ohio agricultural production teachers employed during the 1981-82 year. The second population consisted of all agricultural education majors who were seeking certification as an agricultural production teacher. A total of 61 skills pertaining to swine, beef, dairy, sheep, and poultry production were contained on the mail questionnaire.

Findings. Results indicated that a majority of both current and prospective teachers had only read about or seen the skills performed and had never actually performed the skills themselves. Overall, prospective and current teachers reported medium levels of confidence in their ability to demonstrate the skills. The home farm was the major source of skill acquisition reported by both current and prospective teachers. However, current teachers reported that poultry and sheep skills were primarily learned while teaching agriculture. For each skill, only about one-third of the prospective teachers and current teachers reported they had actually performed the skill.

For each skill, an average of nearly 50 percent of the current teachers indicated the skill was not taught. A large majority of those teachers who taught the skills did so via discussion methods. Prospective teachers who owned, worked, or were reared on a livestock farm and who completed more livestock production courses and high school vocational agriculture tended to report higher performance levels. Current teachers having higher performance levels tended to have been reared on a livestock farm, currently own or work on a livestock farm, be responsible for supervising a school livestock farm, and have more years of agriculture teaching experience. In all cases, livestock skill performance level was found to be very strongly related to confidence in demonstrating the skill.

RICKETTS, Richard T. "Personality of Adult Educational Instructors in Agriculture." Master of Science Thesis, 1982, The Ohio State University, Columbus.

Purpose. This study determined the personality traits of a group of Farm Business Planning Analysis Teachers in Ohio as measured by Cattell's Sixteen Personality Factor (16PF).

Method. The traits were compared to successful personality traits of teachers as determined by prior research. In addition, the personality of each teacher was guaged by a sample of his students, and the teacher himself.

Findings. The traits correlated with successful teaching according to prior research were; trusting, imaginative, venturesome, more intelligent, assertive, active, organized, and emotionally stable. According to the instrument, the teachers in this study demonstrated the traits conscientious, controlled, intelligent, emotionally stable, trusting, self-sufficient, tough poise, and conservative. Teachers older than the median age (43) appeared to be more tense, happy-go-lucky, and group-dependent than their younger counterparts. In addition, the experienced teachers (over 10 years) appeared to be more humble, suspicious, stable, relaxed, and experimentative than their less experienced counter-parts. Finally, the teachers' students tended to rate their teachers higher than the standardized instrument, while the teacher's self-rating was moderately accurate.

RICKETTS, Samuel C. "Leadership and Personal Development Abilities Possessed by High School Seniors Who Are FFA Members in Superior FFA Chapters, Non-Superior Chapters, and by Seniors Who Were Never Enrolled in Vocational Agriculture." Ph.D. Dissertation, 1982, The Ohio State University, Columbus.

Purpose. The primary purpose of this study was to describe the leadership and personal development abilities that were possessed by four groups of high school senior males, namely vocational agriculture/FFA students who participated in high quality (superior) FFA chapters, vocational agriculture/FFA students who participated in low quality (non-superior) FFA chapters, and those non-vocational agriculture students from the schools with superior and non-superior FFA chapters who were never enrolled in vocational agriculture.

Method. Active FFA members in traditional vocational agriculture four year programs, single teacher departments with high schools of less than 1,000 total enrollment in Middle Tennessee comprised the target population for this study. The sample included students from eight schools with superior FFA chapters and eight schools with non-superior FFA chapters. Each student was given an instrument that included, among other things, a 66 question criterion-referenced multiple choice test which measured leadership and personal development skills. A Kuder-Richardson 20 reliability coefficient of .86 was obtained on the instrument measuring leadership and personal development skills.

Findings. The findings, by using post hoc analysis (Newman-Keuls test) on the unequal sized groups, reported that vocational agriculture students from superior and non-superior FFA chapters possess significantly (at the .05 level) more leadership and personal development abilities than students who have never been enrolled in vocational agriculture. However, the extent to which the vocational agricultural FFA students possessed leadership and personal development abilities was much less than this writer feels that the profession should be willing to accept since vocational agriculture/FFA students scored at the 58 percent mastery level. Non-vocational agriculture students scored at the 46 percent mastery level. Considerably more of the vocational agriculture students from the superior FFA chapters (33 percent)

possessed a 75 percent mastery level of leadership and personal development abilities as compared to 14 percent of the vocational agriculture students from non-superior FFA chapters and three percent for students who had never been enrolled in vocational agriculture.

SHIAO, Kun Sun. "Extension Personnel Selection and Performance Appraisal: Its Accuracy and Relevance." Ph.D. Dissertation, 1982, The Ohio State University, Columbus.

Purpose. The major purposes of this study were to determine whether the Incomplete Sentence Form and the Performance-against-Standard Form developed by the American Institutes for Research (AIR) have acceptable levels of reliability and validity, and whether the validation of the two forms could be improved by using different methods of test construction. The sample for this study consisted of sixty-two extension agents who had worked at least six months but not more than three years prior to this study.

Method. The possible methods included (1) job analysis, (2) item selection, (3) scoring system followed to measure selection and performance, and (4) procedures used to establish reliability and validity of the two forms. These factors were examined for their comparative effects on the validation of test forms. The estimated reliability of the two forms was confirmed through the measurement of Cronbach's Alpha. Also, the efficacy of the use of a correlational index in item selection and empirical-interval score with a three-point scale in scoring procedures was examined for improving the reliability of the two forms. The explained validity of the two forms was manifested with the test of construct validity in the Performance-against-Standard Form and of construct validity and concurrent validity in the Incomplete Sentence Form.

Findings. The research findings were as follows: (1) Thirty-nine items in the Performance-against-Standard Form were eliminated because of their failure to meet the criterion of applicability and the significant test of item-component correlation. Six items in the Incomplete Sentence Form also failed to meet the significant test in item-total correlation and/or item-criterion correlation, and thus were not included in the selection test. (2) The empirical-interval scoring procedure proved to be more reliable than the pre-weighted scoring and the percentile scoring procedures used in the AIR study. A three-point scale was also found to be more effective than a two-point scale for measuring. (3) The ten components of the Performance-against Standard Form evidenced a composite structure. The findings also confirmed that this form is highly valid for practical use. (4) The results of the factor analysis and regression analysis showed a low reliability and validity for the Incomplete Sentence Form. It is therefore considered to be an ineffective instrument, and an inaccurate predictor of on-the-job performance of county extension agents.

SMITH, Keith L. "Improving Ohio's Extension Agent Orientation With a New Needs Assessment Evaluation Instrument." Staff Study, 1982, The Ohio State University, Columbus.

Purpose. The research was to (1) examine a new evaluation instrument for Extension Agent Orientation Conferences in Ohio, and (2) to determine if the instrument could lead to the improvement of orientation programs based on needs assessment qualities. The instrument was designed to examine the perceived importance of orientation topics, and to compare the importance with the respondents' perceived knowledge accrual and perceived need for further training in these individual orientation topic areas.

Method. Data were obtained from 109 of the 115 agents who attended the four New Agent Orientation Conferences held from September 1980 to February 1982 (94.8% response).

Findings. Improvement in the orientation conferences was measured by analysis of the mean perceived importance and mean perceived knowledge competency for each program topic, across four separate conferences.

Although the results showed no gain in mean scores over time in each program area, it is important to note that means remained consistent and high. This indicates that enacted changes in the orientation program resulting from information obtained through the needs assessment qualities of the instrument are maintaining the credibility of Ohio's Orientation Conferences by meeting the needs of new agents.

SNOOK, Marilynne R. "Teacher Education Redesign in Agricultural Education: A Model and Its Implementation." Ph.D. Dissertation, 1982, The Ohio State University, Columbus.

Purpose. Considering the difficulties teachers face in trying to meet the educational needs of students while at the same time addressing the certification requirements within a framework of university and societal constraints, an exploratory study was undertaken to outline the historical events leading to the 1980 teacher education redesign efforts in Ohio. The study also provided baseline data regarding how adequately prepared teacher candidates in Agricultural Education perceived themselves in the five professional curriculum areas of teacher education redesign (reading process, behavioral problems, human relations, self-assessment of teaching and educational media.

Method. Data were collected from course instructors and teacher candidates completing the agricultural education curriculum in 1980-81 at The Ohio State University.

Findings. Findings show that teacher candidates perceived a greater amount of course emphasis for the redesign factors in the advanced agricultural education courses as compared to the beginning level courses. Generally greater course emphasis was attributed to the redesign factors by teacher candidates than was attributed by instructors teaching the courses. Course instructors and teacher candidates frequently agreed in degree of emphasis for

redesign factors taught in specified courses where teacher education redesign was targeted for impact.

For the five professional curriculum areas identified, educational media and human behavior were attributed the greatest amount of course emphasis while reading process was attributed the least amount of course emphasis. Both teacher candidates and course instructors perceived moderate to great value for the redesign factors, thus indicating their perceived importance in the preparation of successful teachers.

SUANDI, Turiman Bin. "Organizational Commitment of Agents in the Ohio Cooperative Extension Service." Master of Science Thesis, 1982, The Ohio State University, Columbus.

Purpose. The primary purpose of this study was to determine the major factors related to organizational commitment among county extension agents in the Ohio Cooperative Extension Service (OCES).

Method. The respondents were 108 randomly selected extension agents. Data were collected by mail questionnaires.

Findings. Agents were generally committed to the OCES. There was no significant difference in the level of commitment between agriculture agents and home economics agents. However, 4-H agents were less committed to the OCES than agriculture or home economics agents.

From the Pearson product moment correlation analysis, it was found that there was a positive relationship between organizational commitment and personal characteristics: age, being a female, and tenure; job characteristics: skill variety, job autonomy, and feedback; and work experiences: role clarity, peer group cohesion, group attitudes toward OCES, realization of expectations, first-year job challenge, personal importance, and self-image reinforcement.

From the stepwise multiple regression analysis, self-image reinforcement was found to be the best single predictor of commitment. The best group predictor of commitment included sex, tenure, job autonomy, group attitudes toward OCES, and personal importance.

SUTPHIN, H. Dean. "Positions Held by Teachers, Teacher Educators, and State Supervisors about Selected National Issues in Agricultural Education." Ph.D. Dissertation, 1981, The Ohio State University, Columbus.

Purpose. The purpose of this study was to determine the extent to which alternative positions on nine selected national issues pertaining to agricultural education in the public school system were acceptable to agricultural education teachers, teacher educators, and state supervisors.

Methods. Essentially the procedures employed three techniques: (a) a review of related literature to identify the alternative positions, (b) refinement of the position statements by a jury of seven experts, and (c) the

use of a modified Delphi technique to identify the extent of acceptance of the alternative positions. Delphi panel members consisted of experts in agricultural education including 42 teacher educators, 32 teachers, and 30 state supervisors. Position of employment in the profession, third party raters, and self-ratings were used to screen respondents.

The Delphi consisted of three consecutive rounds which asked panelists to indicate their agreement or disagreement with the alternative positions and provided written commentary. Respondents indicated the need for further study and discussion of the issues on round three, by checking a four point rating scale. Eighty-six or 82.7 percent of the panelists completed the study including 23 teachers, 37 teacher educators, and 26 state supervisors.

Findings. Seventy-nine alternative positions concerning the nine issues were identified. Fifty, 14, and 15 of the positions were supported by 90.0 to 100.0, 40.0 to 89.0, and 0 to 39.0 percent of the panelists, respectively. All panel members agreed with 18 positions, while all panelists disagreed with 5 positions. The variability by the groups teachers, teacher educators, and state supervisors in agreement with the positions ranged from less than 5.0 percent, 5.0 to 15.0, and more than 15 percent on 39, 22, and 20 positions, respectively. Commentary by panelists suggested modifications and additions to some of the positions. Issues most in need of further study and discussion included appropriate FFA clientele, acceptable occupational expertise programs for non-production and production students, and the purpose of agricultural education.

WHITE, Beth H. "The Relationship Between Participation in a Farm Education Program and Appreciation for and Cognitive Awareness of Farm Life." Master of Science Thesis, 1982, The Ohio State University, Columbus.

Purpose and Method. Farm education programs are designed to provide an opportunity for students of all ages to visit a farm, learn aspects of farm life, and become aware of the hard work and responsibilities of the farmer. Several existing farm programs are discussed in this paper, with particular emphasis on the Ohio Farm program in St. Louisville, Ohio. The objectives of the Ohio Farm concentrate in the affective and cognitive domains of learning.

Findings. The results of the study provided information as to whether or not the objectives of the Ohio Farm are being satisfied. As measured by the instrument used in the study, no relationship was found between participation in the Ohio Farm program and cognitive awareness of farm life. The conclusions of the study revealed the need for further research in the affective domain of learning for the development of appreciation for farm life by participants of the Ohio Farm program.

OKLAHOMA

AL-ZAIDI, Abdullah A. "Adequacies of Curriculum and Training in Agriculture Provided at Three Saudi Institutions as Assessed by Administrators, Instructors, Senior Students, and Regional Directors." Doctor of Education Dissertation, 1982, Oklahoma State University, Stillwater.

Purpose. The major purpose of the study was to assess the degree of adequacy of the curriculum and training in agriculture now being offered at two universities and one agricultural institute in the Kingdom of Saudi Arabia.

Method. Data were secured by responses from (1) administrators, (2) instructors, and (3) senior students at the three institutions, as well as directors of the Ministry of Agriculture and Water Regional Branches and the Agricultural Bank Main Branches. Data were gathered through individual and group interviews with a total of 238 respondents.

Findings. In general, it can be stated that the present curriculum was viewed as satisfactory by all groups, even though certain items were assessed as being relatively more important than were others. However, when responses concerning student adequacy in each of these areas were collated, it was quite clear that many respondents assessed the proficiency of graduates to be somewhat less than fully adequate. Instructors and administrators tended to see graduates as more able than did senior students and directors. Among the 16 selected statements related to curriculum development and implementation and the seven goal statements, the four highest scoring statements were (a) "securing evidence that teaching faculty is willing to place emphasis upon the further development and implementation of indigenous agricultural research services:, (b) "securing evidence that teaching faculty is strongly committed to exerting a special effort to provide effective training for professional agriculturalists", (c) "develop a feedback mechanism for bringing problems to the attention of agricultural researchers", and (d) "assessment of the performance of graduates on-the-job".

Statements related to curriculum and course content ranking high were statements, (a) "summer training for students needs to be emphasized", (b) "more facilities and audio-visual materials needed" and (c) "evaluation of curriculum should be conducted annually."

Among the 71 items of present course content in the six areas of agriculture taught, those rated as most important were, (a) "Summer Experience in Animal Production", (b) "Irrigation and Drainage", (c) "Field Crops", (d) "Animal Nutrition", (e) "Saudi Agricultural Economics" and (f) "Islamic Culture".

In general, directors tended to give low ratings to student adequacy than did those respondents in combined institutional groupings.

Among a number of recommendations made, the most pertinent was: a combined committee from the Colleges of Agriculture, the Agricultural Institute, the Ministry of Agriculture and Water, and the Agricultural Bank by carefully selected and charged with the responsibility to make definite plans for developing and improving present curriculum and develop an evaluation system designed for the present agricultural curriculum and specially directed towards the training of agricultural specialists.

AFFLAH, Nyantakyi K. "Agricultural Mechanics at the Secondary School Level in Ghana." Master of Science Thesis, 1982, Oklahoma State University, Stillwater.

Purpose. The purposes of the study were: (1) to determine the present status of agricultural mechanics in Ghanaian Secondary Schools, (2) to determine the need for the development of more practical and productive agricultural mechanics skills among students of the schools, and (3) to determine the extent of teaching emphasis needed for the schools in selected agricultural mechanics areas.

Method. Data were secured by a survey questionnaire returned by 25 school heads and their agricultural science teachers of secondary schools in all nine regions of Ghana.

Findings. The majority of the secondary schools in Ghana are situated on lands ranging in sizes from 300 to 700 acres, 40% of which could be used for agricultural purposes. Presently, only 10% or less is used. Over 90% of the schools depend on manpower or hand labor, small hand tools, and equipment such as cutlasses and hoes for agricultural work.

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School heads judged secondary school graduates as "poorly equipped" in agricultural mechanics skills. About half (52%) of the agricultural science teachers judged these graduates as "fairly equipped," and about half (48%) judged them "poorly equipped" in those skills. All respondents "strongly agree" that agricultural mechanics should receive more attention in Ghanaian Secondary Schools. Regarding the extent of teaching emphasis needed for general topics of agricultural mechanics, agricultural science teachers indicated that Soil and Water Management, and Rural Electrification should be taught to a "great extent"; school heads felt those topics should be taught "always." Agricultural science teachers also indicated that Concrete Work should be taught to a "great extent" but school heads felt it should be "moderate." Both sides, however, agreed that Farm Motors (Engines) should be taught "always"; Shop Tools and Equipment, Woodwork and Farm Carpentry, Farm Home Conveniences and Sanitation, and Fencing should be taught to a "great extent"; Metal Work, Farm Machinery, and Farm Buildings should be "moderate"; Paint Work, Rope and Leather Work, Trucks and Tractors, and Transmission of Power should all be taught to a "little extent."

BERGMAN, Michael F. "Impact of a Planned Public Relations Program by the Cooperative Extension Service in Muskogee County, Oklahoma." Doctor of Education Dissertation, 1982, Oklahoma State University, Stillwater.

Purpose. The purpose of this study was to determine the influence of a public relations program by the Cooperative Extension Service in Muskogee County, Oklahoma. A second purpose was to determine the awareness of the Cooperative Extension Service by the general public in Muskogee County, Oklahoma using a random sample.

Method. The telephone interview technique was used to collect the data. Ten questions were designated with appropriate weighted numerical scores to assist in determining the respondents' awareness of the Muskogee County Cooperative Extension Service. Statistical procedures employed in the study included frequency distribution and Chi-square.

Findings. The responses by the awareness participants in this study revealed that 56% were aware of having an Extension office in Muskogee County. Most of the involvement by the respondents and their family members in Extension was in the 4-H program area. Seventy-four percent who had contacted the Extension office for information made the contact by telephone. Almost 21% of the respondents had participated in an Extension sponsored meeting, with over 93% of those respondents indicating that the information they received was valuable. Well over a majority of respondents read news articles about Extension or 4-H activities and news columns by Extension agents. Close to 48% of all respondents requested additional information about Extension programs, with a majority of those respondents indicating the area of agriculture. Two-thirds of the respondents felt that increased funding of Cooperative Extension would be beneficial for the residents of Muskogee County. Muskogee County residents' occupation, sex, wanting to receive information, or feeling that increased funding of Cooperative Extension would be beneficial had no relationship with the awareness of Cooperative Extension; however, age, involvement in agriculture, education level, race, and household income, had a relationship with the awareness of the Cooperative Extension Service. Over 91% of the respondents had some awareness of the Cooperative Extension Service. The overall awareness level in Muskogee County was found to be low.

[redacted], Phillip L. "Characteristics, Accomplishments, and Skills of the Successful Oklahoma Vocational Agriculture Teachers as Perceived by the Teachers Themselves." Master of Science Thesis, 1982, Oklahoma State University, Stillwater.

Purpose. The primary purpose of this study was to determine the characteristics, accomplishments, and skills of the successful Oklahoma vocational agriculture teachers as perceived by the teachers themselves. It concerned total program characteristics, classroom skills, SOE skills, Ag Mechanics skills, FFA skills, adult education skills, school and community skills, and personal characteristics. It also was to determine the amount of time currently being spent on SOE, Ag Mechanics, FFA adult education, and school and community activities and the amount of time which should be spent on those areas. Also, the accomplishments necessary to be considered successful by the State Department of Vo-Tech were sought.

Method. A combination mail and telephone survey was developed and used to contact the total population of vocational agriculture teachers (464).

Findings. Over 88 percent of the teachers responded. They identified the characteristics, accomplishments, and skills they thought were necessary for success. The top response was honesty.

In general, teachers indicated the need to return to some of the basics of teaching from years past — discipline, motivation, fairness, respect, and interest in the students.

COLLINS, James R. "Identification of Selected Factors Which Influence Job Satisfaction of Vocational Agriculture Teachers in Area VIII of Texas." Doctor of Education Dissertation, 1982, Oklahoma State University, Stillwater.

Purpose. The purpose of this study was to identify selected factors which influence the job satisfaction of vocational agriculture teachers in Area VIII of Texas.

Method. One hundred and twenty-eight vocational agriculture teachers (86.67%) employed in Area VIII during the 1981-82 school year participated in the study. A sixty-seven item questionnaire was administered at district in-service meetings in March, 1982 in order to gather data needed for this study. Questionnaires were mailed to those teachers who were unable to attend the in-service meetings. In order to analyze the data numbers, percentages, means and standard deviations were employed with respect to responses to each of the selected factors used in this study. Pearson product-moment correlations were computed to determine relationships between responses and three selected variables which were: (1) years of teaching experience, (2) type of Vo Ag department (single or multiple teacher) and (3) educational level of the teacher.

Findings. Based upon the mean responses of the teachers participating in this study it was determined that, of the sixty-seven factors considered, forty-six factors were found to be sources of satisfaction, while eight factors were rated as sources of dissatisfaction. The factor "working relationship with area supervisor" was rated as the greatest source of satisfaction and was the only factor in the study which was rated a source of "high satisfaction". The factor which was found to be the source of greatest dissatisfaction was the "school emphasis on the athletic program", which was rated as a source of "slight dissatisfaction". The highest correlation between the selected variable "years of experience" and the responses of the teachers was found to exist with the factor "spouse's attitude toward Vo Ag teaching" (r=0.32). The variable "type of Vo Ag department" was found to be most highly correlated with the factor "livestock equipment (scales, clippers, etc.)" (r=0.31) while the variable "educational level" was determined to have the highest correlation with the responses to the factors "employment in a single teacher department" and "involvement with local church" (r=0.27).

GACHATHI, Winifred N. "An Assessment of the Land Availability Situation in Kenya and Possible Non-farm Occupational Alternatives for People Displaced from Farms." Master of Science Thesis, 1982, Oklahoma State University, Stillwater.

Purpose. This study utilized a review of literature, interviews and a survey instrument to determine non-farm occupational alternatives that Kenyan high school agriculture education curriculum could offer as a means of absorbing people displaced from farm backgrounds. The study was also aimed at determining the most effective way in which to implement this.

Method. Two groups were surveyed, agriculture education teachers and agriculture officers in the Central Province of Kenya. Seventy-three percent of the teachers and thirteen percent of the officers responded. Their answers were then tabulated and descriptive statistics used in polling their answers and comparing them.

Findings. This study determined that a land availability problem is perceived to exist in Kenya and that the school system is the obvious medium in which to approach the problem in a practical manner. The problem is perceived to be serious enough to warrant immediate attention and to continue getting worse in the future unless dealt with effectively. Opinions differed between the two sampled groups on how the problem should be tackled, the teachers favoring the school system while the officers favored government problems Both groups however, seemed to agree that occupations geared towards small business and industry in the private sector with some credit provided by the government is an effective and viable solution.

GARJI, Deborah C. "A Survey of Vocational Agriculture Teachers and Students as to Use and Effectiveness of Selected Teaching Methods and Skills." Master of Science Thesis, 1982, Oklahoma State University, Stillwater.

Purpose. Much research has been done on the relative effectiveness of several teaching methods and skills used in teaching. Several surveys have also been conducted asking teachers which methods they feel are most effective.

Method. In the present study, a questionnaire was used to solicit the opinions of teachers and students of the use and effectiveness of selected teaching methods. Their assessments of the methods were used to find overall average rankings of the methods for both teachers and students. Each teacher also reported the average percentage of the time they used each method in their classroom. Average percentages were then found for each method.

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Findings. Teachers surveyed found lecture and discussion to be the most valuable method to use in a classroom for motivation of students, while students surveyed said field trips were the most effective method to use to motivate them. Teachers reported the mean use of the lecture and discussion method was 20%. Methods used between 5% and 10% include class discussion, supervised study and discussion, demonstrations, resource persons, lecture, and question and answer. Methods that were used less than 5% were films, small groups, motivational games, debate, and role play. When asked about the teaching skills of motivation, use of examples, questioning, and cueing, motivation of students was ranked number one, with a mean use of 36.75% of classroom time.

GERLING, Joseph F. "Oklahoma Cooperative Extension Service Agricultural Agent's Perceptions of Frequency of Practice of Adult Education Principles." Doctor of Education Dissertation, 1982, Oklahoma State University, Stillwater.

Purpose. The purposes of this study were to: (1) identify the basic principles of adult learning that provide the foundation for adult education and (2) determine the extent county level professional staff members involved in the Agricultural Programs of the Oklahoma Cooperative Extension Service perceive themselves as implementing these principles.

Method. Through a comprehensive literature review a research team of six individuals identified the principles of adult education. These principles were validated by a jury of adult education leaders. From the validated principles, a questionnaire was developed to measure the extent of perceived application of these principles. The questionnaire was verified, checked for reliability and then adapted for the different populations to be studied by the research team. The population of this study was composed of those individuals identified as having primary responsibility for adult programming at the county level with the agricultural program area of the Oklahoma Cooperative Extension Service. Out of 82 questionnaires sent out, 77 were returned, representing 94% of the survey population. From the data collected, mean values were calculated and analyzed for each principle according to the different variables identified in the study. The principles were also rank ordered by means.

Findings. The results of the study indicated that there are nine basic principles of adult learning and that the developed questionnaire is a potentially effective tool for analyzing adult education practices in the Cooperative Extension Service setting related to the perceived application of these practices. The study revealed that county agricultural staff in the Oklahoma Cooperative Extension Service perceived themselves as "frequently" practicing all nine principles of adult education identified in the study and that an individual's perception of the extent of perceived practice of specific principles may vary according to age, academic degree, degree discipline and years of work experience.

HACKETT, Kevin R. "The Perceived Awareness of 4-H Youth Programs by the Adult Population of Canadian County, Oklahoma." Master of Science Thesis, 1982, Oklahoma State University, Stillwater.

Purpose. The purpose of this study was to determine the perceived awareness of the 4-H youth program among the adult population residing in Canadian County, Oklahoma.

Method. A telephone-survey-interview was administered to 382 adults chosen by a computer random number selection from all telephone exchanges in the county. The instrument contained 13 questions concerning the respondents' awareness and knowledge of 4-H and five questions gathering demographic information about the respondents.

Findings. Ninety-two percent of the adults of Canadian County have heard of 4-H, but only 51 percent know much about 4-H. Forty-six percent feel that 4-H is for youth from farms and rural areas only. Four out of five adults who have heard of 4-H first heard about it at school. Over half of the adults in the county receive most of their current information about what 4-H is doing from their local newspaper. Fifteen percent feel they do not receive any current information about what 4-H is doing.

The "4-H School or Community Club" is the structure that most all (87 percent) adults are aware of. Fifty-seven percent are aware of "4-H Project Clubs". The offering of "4-H School Enrichment Programs" is known by only 15 percent of the adults in the county. Only 53 percent of the adult residents of Canadian County know where the county 4-H headquarters is located. Nearly 90 percent of the residents do not have any idea where 4-H gets the majority of its funding. Thirty-two percent of the adults residing in Canadian County have been a member of 4-H and 38 percent have had one or more immediate family members who are or have been a 4-H member.

Of the residents not aware of 4-H, 7 out of 10 have lived in Canadian County less than one year. Blacks, American Indians, and Asian or Pacific Islanders make up a larger percentage of those not aware of 4-H than those who are aware of 4-H. Females are just slightly more aware of 4-H than males. There is no relationship between 4-H awareness and age or level of schooling completed.

JENKINS, Dale K. Jr. "The Status of the Specialized Agriculture Mechanics Programs in the Central District of the State of Oklahoma." Master of Science Thesis, 1982, Oklahoma State University, Stillwater.

Purpose. This study was designed to determine the status of selected aspects of the specialized agriculture mechanics classes in the central district of the State of Oklahoma.

Findings. From the data presented, it was found that 100 percent of all schools surveyed had Agriculture Mechanics I with an enrollment of 463 students in 41 schools. Fifty-five percent of all schools surveyed had Agriculture Mechanics II with an enrollment of 201 students in 22 schools. Also, it was found that the schools interviewed had an enrollment of 131 students in area vocational-technical schools with an average of four students per school. Findings presented in this report revealed that 24 of the schools surveyed did not have the Operations and Procedures Manual for Vocational Agriculture Education.

It was found that 100 percent of the schools polled were using the Agriculture Mechanics I core curriculum.

It was found that 99 percent of the instructors teaching Agriculture Mechanics use skills work, demonstration, projects, class work, and other good teaching methods. It was also found that the average shop size in the 42 schools surveyed was 75 feet by 44 feet and the average classroom size of these schools was 30 feet by 27 feet. All 42 of the schools polled were funded by their school districts and by state matching money.

It was calculated that there is great interest in specialized agriculture mechanics among students in high schools in the central district as evidenced by the enrollment. There are a large number of students enrolled in area vocational-technical schools and a large number are double enrolled. It was concluded that not all teachers in the central district have a copy of the Operations and Procedures Manual for Vocational Agriculture Education and very few teachers made an effort to acquaint their administration with the manual. The core curriculum for Agriculture Mechanics I was being used by all teachers. It also noted that the physical facilities for teaching agriculture mechanics, shop, and classroom are adequate with room for improvement. It also noted that the funding for agriculture mechanics classes in the central district are very good.

JENKINS, Jim A. "Expectations of Vocational Agriculture by Citizens of the Blackwell Community." Master of Science Thesis, 1982, Oklahoma State University, Stillwater.

Purpose. The survey was designed to determine the attitudes of the respondents regarding the Vocational Agriculture program: (1) general agriculture and the high school curriculum; (2) classroom instruction; (3) supervised occupational experience program; (4) the role of the FFA; (5) agricultural mechanics; and (6) the Young Farmers Program. The responsents included all five school administrators, all five members of the board of education, 20 randomly selected businessmen, and 20 randomly selected FFA parents.

Method. Questionnaires were mailed to 50 citizens of the Blackwell community.

Findings. The major findings concerning programs for high school students and adults were: (1) vocational agriculture should provide opportunities that will give a student knowledge and experience in the farming business and in occupations closely related to farming; (2) the subject areas of the classroom should parallel the agricultural industry of the local community and regular visits and field trips should be made to these facilities; (3) the supervised occupational experience program is a necessary part of the program that converts classroom instruction to practical experience, also production projects should be emphasized more and the students should be encouraged to exhibit their animals at fairs and shows; (4) all students should be encouraged to become FFA members and become involved in some type of interests, public speaking, or chapter projects, also chapter should publicize its activities more and review these activities with the school administrators; (5) the agricultural mechanics program is a vital part of the vocational agriculture program and should emphasize skill acquisition as well as metal works and project completion; (6) the program should assist young men who have completed the vocational program in progressing in their agricultural careers and a Young Farmer Chapter should be provided to accomplish

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this. The vocational agriculture program is expected to provide training to students which will produce a basic foundation of knowledge and skills necessary to survive in the farming business or occupations closely related to the farming industry.

KAKIYES, Kefas N. "Policy and Procedures for the Acquisition and Use of Production Credit by Nigerian Farmers in Plateau State." Master of Science Thesis, 1982, Oklahoma State University, Stillwater.

Purpose. The farmers of Plateau State are searching for new possibilities concerning credit sources and availability as a step toward increasing agricultural productivity. The constraints limiting farm credit formed the major basis for the conduct of the study. A concomitant purpose was to explore possible ways of bringing about needed improvement in selected aspects of credit policy.

Method. A survey instrument was developed to ascertain the perceptions of farmers and lenders toward potential credit sources and their availability. Steve Dayom, principal of the College of Agriculture at Lafia, assisted the authors in the collection data by involving the Senior staff members of the Nigerian Ministry of Agriculture and the Extension Service by interviewing farmers and lenders in the local government areas.

Findings. The findings revealed that few lending agencies held adequate credit resources to meet the needs of Plateau State farmers. Many farmers indicated that the interest rates charged by individuals and commercial banks were excessively high.

Most farmers pointed out that the difficulty in acquiring valid title to their land, which has always been the farmers major source of equity and collateral, was a definite constraint in obtaining production credit. In addition, the short repayment schedules made it difficult for farmers who borrowed to plant a crop, market the produce and pay the loan back by the maturity date. As a result of the findings and conclusions the following recommendations were made: (1) Banks could be more assistance to farmers if they were a closer proximity to the rural areas of the state, (2) interest rates should be kept as low as possible, (3) lenders should be more flexible concerning collateral requirements, (4) the "Cooperative Societies" should reorganize so they could assist in meeting the needs of farmers and (5) lenders should provide adequate supervision to assist farmers in determining credit needs and how to manage production risks.

MILLER, Marl E. "Effectiveness of the 4-H Life Skills Approach to Leadership Development." Doctor of Education Dissertation, 1981, Oklahoma State University, Stillwater.

Purpose. The primary purpose of this study was to determine if the 4-H Life Skills Approach to Leadership Development, as presented through the Southern Region 4-H Leadership Life Skills materials, was a more effective method of teaching skills that are necessary to perform leadership roles than current methods. The life skills included in the materials were generalized into seven generic classifications: (1) communications skills, (2) skills in getting along with others, (3) skills in understanding yourself, (4) skills in working with groups, (5) management skills, (6) skills in learning, and (7) decision making skills.

Method. An instrument to determine perception of ability to perform the skills was developed and administered as a pre and post test. The instrument was completed by 4-H youth and the youths' adult volunteer leaders. Eight treatment and eight similar control counties with 312 youth (156 TR and 156 CN) were included in the analysis. A stratified random selection of participants was utilized.

Findings. Chi square statistical procedures were utilized to determine significance at the .05 level. There was an apparent difference between the pre and post tests on leadership life skills for participating youth. There was a significant difference in the leadership life skills change (a) between the treatment and control groups, (b) between age groups, and (c) between group officers and non-officers as perceived by volunteer leaders. There was no significant difference in the leadership life skills change (a) between the treatment and control groups, (b) between age groups, and (c) between group officers and non-officers as perceived by members. There was no significant difference in the perceptions youth have of their change in leadership life skills compared to that of their adult volunteer leaders' perceptions of the change in the youth's skills.

From the findings it was concluded that the 4-H Life Skills Approach to Leadership Development presented in the Southern Region 4-H Leadership Life Skills materials is a more effective method of teaching skills necessary to perform leadership roles than current

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methods. It was further concluded that Extension resources can justifiably be devoted to further development, utilization, and testing of the 4-H Life Skills Approach to Leadership Development.

RILEY, David J. "A Follow-Up Study of Selected Graduates and Their Employers From Three Secondary Agricultural Training Centers in Jamaica." Doctor of Education Dissertation, 1982, Oklahoma State University, Stillwater.

Purpose. This study was conducted primarily to provide feedback for the agricultural education planners in Jamaica. This study sought to achieve the following objectives: (1) to ascertain selected graduates and their employers perceptions of the roles, goals and needs of three agricultural training centers in Jamaica; (2) to ascertain from the selected employers a rating of the selected graduates job performance; (3) to ascertain graduates perceptions as to the benefits derived from participating in the selected agricultural training programs; (4) to ascertain the graduates future plans, present status and degree of curriculum relevancy for their employment needs.

Method. This investigation included selected graduates and their employers from Elim and Knockalva Agricultural Training Centers as well as Dinthill Technical High School.

Findings. The findings of this investigation included the following: (1) The graduates and employers felt the agricultural training centers were achieving the stated goals, however more emphasis is needed on training farmers in the location of schools to increase agricultural production and improve rural life. More emphasis is also in Food Processing and Farm Mechanics. (2) Identified needs of these centers included more interaction with other agricultural education programs around the world, placement programs for the graduates and more support from the Ministry of Agriculture. (3) Job performance ratings by the employers were generally satisfactory. (4) Benefits and added comment statements supported overwhelmingly in favor of these types of agricultural training programs by the graduates.

Inferences that have possible application to future research are: (1) The Secondary Agricultural Training Center concept is an integral component of a developing countries rural development process. (2) The need for a public relations effort by these institutions is critical in their success. (3) Integration of efforts by Ministry of Education and Ministry of Agriculture is also critical in taking advantage of human resources trained in such institutions. (4) A comprehensive evaluation system is needed to give continuous feedback to the educational planners.

SMITH, Peter C. "Factors Related to Enrollment Persistence and Non-persistence at Northeastern Oklahoma A&M College Division of Agriculture." Master of Science Thesis, 1982, Oklahoma State University, Stillwater.

Purpose. In the last two decades, considerable research has been done involving the identification of variables of nonpersistence. In the present study, 13 variables were tested. Students enrolled at Northeastern Oklahoma A&M College in the Fall of 1981 were compiled on a list and checked in the Spring of 1982 for the number of students that dropped out the first year.

Method. A list was compiled of both persisters and nonpersisters. Measurements were done on both groups with respect to each variable. The variables that were considered were: age; sex; college objective; college residency; high school grade - Social Sciences, Natural Sciences, Math, English; ACT scores - Math, English, Natural Science, Social Science, Composite.

Findings. Results indicated that high school Social Science grades, Social Science ACT scores, age, and high school English grades were statistically different by Chi Square. Characteristics of the nonpersisters involved in the high school grades of English and Social Sciences were less than or equal to a 2.0, students less than 18 years old, and the ACT Social Science score of 17 or less.

Continued statistical analysis should be done in following years. Counseling emphasis should be placed on High School English and Social Science grades, age of the student, and Social Science ACT scores. Correlation coefficients and multiple correlation analysis are suggested as follow-up steps.

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SMITH, Steven C. "Teacher Perceptions of the Supervised Occupational Experience Programs in Oklahoma Vocational Agriculture Departments." Doctor of Education Dissertation, 1982, Oklahoma State University, Stillwater.

Purpose. The purpose of this study was to determine Oklahoma vocational agriculture teacher perceptions of selected aspects of the supervised occupational experience programs (SOEP) of these programs.

Method. The population for this study consisted of certified vocational agriculture teachers employed in Oklahoma high schools the school year of 1981-82. Three hundred ninety (86.5%) of these teachers participated in the study. The information for this study was obtained through the use of a questionnaire which was administered at the teachers' respective Professional Improvement meetings. Questionnaires were mailed to teachers not in attendance at these meetings. Subjective as well as objective responses were solicited from the teachers. Data were analyzed using descriptive statistics.

Findings. The teachers agreed that supervised occupational experience programs should be carried on outside the regular classroom; enhance student appreciation for and the learning of modern agriculture; help prepare the students for an agricultural vocation; and are necessary for the adequate education of students in the field(s) of agriculture. In order, the three areas of most student SOEP involvement are; livestock exhibition, commercial livestock production, and agriculture mechanics. The teachers felt that commercial livestock production should be emphasized to a greater extent than exhibition. The teachers indicated that they provide their students with most assistance in the areas of selecting and procuring livestock and crops, transportation for SOEP activities, and evaluation of the SOE program. The teachers; (1) spend approximately 30 minutes visiting with their students SOE per visit, (2) are reimbursed 'some to most' of any expenses incurred during these visitations, (3) spend about one-fourth of their out-of-class time preparing for or attending livestock shows, (4) believe FFA awards and degrees to be effective motivation to encourage student involvement in SOEPs, (5) feel that there should be departmental policies governing SOEPs, and (6) plan to increase or maintain the emphasis of SOEPs in the future.

WILLIS, Charles V. "The Relationship Between Students' High School Organizations, High School Activities, College Organizations and Their Majors in the College of Agriculture at Oklahoma State University." Master of Science Thesis, 1982, Oklahoma State University, Stillwater.

Purpose. The purpose of this study was to determine the relationship between high school activities, high school organizations, college organizations and the students' choices of college majors in the field of agriculture.

Method. The relationship was based on the students' participation and involvement in activities and organizations. An analysis of the relationship was made by calculating participation and percentage of students involved on a yearly basis.

Findings. It was shown that AGED majors were involved a greater number of years and had a larger percentage of student involvement than did any of the other majors in high school activities and organizations. Likewise ANSI majors had more involvement in college organizations. Patterns and trends were observed among majors in activity areas. The study indicated a relationship between a student's high school activities and organizations and their choice of a college major in agriculture.

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PENNSYLVANIA

AJALA, Adebayo. "The Effects of Task Instruction Sheets on Learners Studying Poultry and Egg Production for Adaptation and Use in Developing Countries." Doctor of Philosophy Dissertation, 1981, The Pennsylvania State University, University Park.

Purpose. The study was undertaken to investigate the effects of using task instruction sheets with vocational agriculture students studying poultry and egg production competencies in Pennsylvania and to develop task instruction sheets with implications for developing countries.

Method. The posttest-only control group experimental design was utilized. Four student teachers from the Department of Agricultural Education, The Pennsylvania State University, taught the poultry and egg unit. A total of 54 students from four participating school districts participated in the study. Two evaluators scored the performance of the learners.

Findings. Findings indicated that: (1) There were significant differences between learners taught by use of task sheets and learners taught by traditional methods for tasks 2, 3, 4, and 6. No significant differences were found for tasks 1 and 5. (2) The male learners did not score significantly higher than the female learners on all six tasks. (3) Except for task 1, the 14- to 15-year olds significantly outscored the 16- to 17-year olds. (4) There were significant differences among the educational levels. Generally, the tenth graders scored significantly higher than both ninth and eleventh graders. (5) Levels of experience did not produce any significant difference. (6) No disordinal interaction was found between the treatment and the sex, age, education, and experience variables. (7) There was no significant relationship between the number of chickens (layers) on the learner's farm/home and his/her task performance. (8) Teachers and specialists who evaluated the task sheets gave them high ratings in content, format, and utility.

BAGGETT, Connie D. "The Influence of Selected Career Information Material on Career Interest of Secondary Students." Doctor of Philosophy Dissertation, 1982, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to examine the influence of selected agricultural career information on the career interest of agricultural students.

Method. Students of randomly selected teachers comprised three experimental groups. The first group consisted of agricultural exploration students who received the treatment. The second group consisted of non-agricultural students who received the treatment. The third group were agricultural students who experienced regular classroom instructions. All students in the treatment group completed a pretest prior to the treatment and a posttest after the treatment. The experimental treatment involved having students view the filmstrip series and listen to narrated cassettes titled A New Look At Careers in Agriculture. The Applied Biological and Agribusiness Interest Inventory was used to detect student vocational agriculture interest.

Findings. The findings indicated that there were no significant differences in student interest scores among the three grade levels (seven, eight, nine). However, a significant F ratio was obtained among the student interest scores based on three experimental groups. A follow-up analysis indicated that differences only existed between means of the two groups receiving the treatment. Agricultural pretest and posttest interest scores were significantly different based on gender, student desire to enter agricultural occupation upon completion of high school, and student intent to enroll in high school vocational agriculture. Based on gender, male student pretest and posttest scores were significantly different while scores for female students were not. Also, posttest scores for male students were significantly higher than those scores for female students. Those students interest scores who gave positive responses to intent to enroll in high school vocational agriculture and who desired agricultural post high school jobs showed significant differences.

CONNOR, Elda. "Relationship Between Level of FFA Participation and Personal and Social Attitudes of Former Vocational Agriculture Students." Master of Education Thesis, 1982, The Pennsylvania State University, University Park.

Purpose. This study focused on determining the relationships between level of FFA participation, personal, and educational factors and the personal, social, and total attitudes of vocational agriculture graduates. It was hypothesized that no relationships would be found between the level of FFA participation, personal, and educational factors and the personal, social, and total attitudes of former vocational agriculture graduates.

Method. The study utilized a questionnaire (descriptive survey research) to collect the data. The questionnaire consisted of the Social Desirability Scale (Crown and Marlowe; 1964) and the Various Social Attitudes Scale (Campbell; 1966). The questionnaire was mailed to 148 randomly selected vocational agriculture graduates (1978 through 1982) from seven high schools in Westmoreland and Indiana Counties in Pennsylvania. Data were collected from a total of 74 vocational agriculture graduates.

Findings. Findings indicated that vocational agriculture graduates who had received FFA proficiency awards, participated in FFA social or recreational activities, served on FFA committees, held assistant officer positions, and earned higher degrees in the FFA expressed more positive personal, social, or total attitudes. Additionally, findings indicated no significant relationships between the remainder of the identified level of FFA participation, personal, and educational factors and the personal, social, and total attitudes of former vocational agriculture graduates.

DIAMOND, James E. "The Effects of Task Instruction Sheets on the Performance of Three Groups of Clientele Studying Sheep Production." Doctor of Philosophy Dissertation, 1981, The Pennsylvania State University, University Park.

Purpose. The purpose of the study was to investigate the effects of using task instruction sheets on the performance scores of three clientele groups studying sheep production. It was theorized that the use of task instruction sheets would augment the performance scores of clientele studying psychomotor tasks.

Method. The population samples for this study consisted of three randomly selected clientele groups. The clientele groups were part-time adult shepherds, 4-H club members and vocational agriculture students. The clientele groups were divided into two treatment levels; one level was given task instruction sheets and one level was not. Eighteen sheep clinics were conducted to offer instruction on six competency-based sheet production tasks. The six tasks were identical in all the clinics. The instructors explained and demonstrated each of the tasks. The clientele practiced the tasks and were evaluated on their performance using a criterion-referenced measure.

Findings. Analysis of variance (ANOVA) was used to determine if a significant difference existed between treatment levels. The Duncan's Multiple Range Test was used to identify where significant differences occurred between treatment levels. Three hypotheses were formulated and tested. The major finding of the study revealed that clientele who were given task instruction sheets scored significantly different than clientele who were not given task instruction sheets.

GONZALEZ, Ismael M. "The Professional Competencies Needed By Extension Agents, The Pennsylvania Cooperative Extension Service." Doctor of Philosophy Dissertation, 1982, The Pennsylvania State University, University Park.

Purpose. The main purpose of this study was to identify and verify the professional competencies needed by extension agents in the Pennsylvania Cooperative Extension Service as perceived by extension agents and state staff members. A subsidiary purpose was to identify when the competencies should be learned by the extension agent.

Method. The target population for this study consisted of county, area, and regional agents in the Pennsylvania Cooperative Extension Service. From this population, a stratified random sample of extension agents in agriculture and natural resources, family living, 4-H, and community development from the nine administrative regions of Extension was selected for the study. A packet that included a questionnaire, cover letter, and self-addresssed stamped envelope was mailed to 116 extension agents and state staff members. Descriptive statistics were used to analyze the data obtained for the demographic characteristics and the section regrading the time when each competency should be learned. Regression analysis was used to test the hypothesis indentified for the study at an alpha value of .05.

Findings. The findings indicate that there were no significant differences in the perceptions of extension agents and state staff members regarding the importance of the nine competency categories. The combined demographic factors showed a significant effect only for the competency categories labeled teaching and program planning. Individual predictor variables such as age, educational level, and years of 4-H membership also showed a significant effect in the case of the youth, program execution, and administration competency scales. All 144 competencies were considered to be moderate to very high in importance. The two groups rated 68 competencies 4.00 or higher, while the remaining 76 competencies received combined ratings of at least 3.00. In identifying when the competencies should be learned, the combined responses for extension agents and state staff members indicated that 26 competencies should be learned before entering the job, 6 competencies during a graduate program, and the remaining 113 can be learned on the job or through inservice. Finally, competencies included in the teaching, communication, and understanding human behavior categories should form a key component of any undergraduate program developed for preparing extension agents.

HAMILTON, George W. "Competencies Needed By Full-Time Employees Entering The Apple Production Industry in Adams County, Pennsylvania". Master of Science Thesis, 1982, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to identify the competencies needed by full-time employees entering the apple production industry. Additionally, the study identified differences among competencies needed for full-time employees working for: (1) large, medium, and small growers (based on acreage), and (2) growers with fresh market, processing market, or combination of marketing outlets.

Method. The design for the study was a descriptive survey. The population for the study consisted of all apple producers listed on the 1978 Apple Referendum list for Adams County, Pennsylvania. A census of 114 apple growers was taken. An instrument was developed which obtained basic background information regarding the respondents' operation and the ratings for the technical apple production competencies. The respondents were asked to rate the competencies using the following scale: 5 = absolutely essential, 4 = requiring above average competence, 3 = requiring average competence, 2 = requiring little competence, and 1 = requiring no competence. A total of 62 (54.4%) growers responded to the mail survey. Nine (17.9%) growers that had not responded to the mail survey were randomly selected to be interviewed. The interviews were conducted to determine whether there were any significant differences between the mailed surveys and the interview survey. In 20 of 21 competency areas no significant difference was found; therefore, the mail and interview grower responses were combined. A total of 71 (62.4%) growers' responses were used in this study.

Findings. The apple growers were in agreement on their ratings of competence needed for full-time entry level employment on 18 of 21 competency areas, regardless of the size of growers' operation. Regarding growers' principal market outlet, apple growers' ratings of competence showed that the growers were in agreement on 20 of 21 competency areas. One hundred ninety-five of 210 competency statements were rated 3.0 (average) or higher. It is recommended that instruction for apple production be based upon the results from this study.

HEASLEY, Paul L. "Microcomputer Assisted Instruction in Teaching Concepts of Farm Business Management to Voctional Agriculture Students". Master of Science Thesis, 1982, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to develop and evaluate a microcomputer assisted farm business management instructional series through a teaching and learning experiment with vocational agriculture students.

Method. A farm business management instructional series was developed around four concepts found in the National FFA and Pennsylvania FFA Farm Business Management contests. A microcomputer instructional program was developed to supplement the series. An achievement test and an attitude inventory, using a semantic differential scale, were developed to assess the students' achievement and attitudes toward farm business management. Fifty-two vocational agriculture students from Central Columbia, Eastern York, and Solanco School Districts were randomly assigned, using Yates randomized number table, to the two treatment levels.

Findings. Analysis of variance with repeated measures was used to analyze the data. Use of the microcomputer did not significantly increase the achievement levels or change the attitudes of those students who utilized both the instructional series and the microcomputer assisted instructional program.

KERR, James M. "The Influence of Occupational Experience on Horticulture Teacher Effectiveness." Master of Science Thesis, 1982, The Pennsylvania State University, University Park.

Purpose. The major purpose of this study was to assess the effectiveness of secondary horticulture teachers, with various levels of occupational competence, in preparing students for entry-level employment.

Method. This ex post facto study involved a follow-up of one- and two-year secondary horticulture program graduates and the employers of these graduates. A questionnaire was developed to assess the effectiveness of horticulture programs and the impact of instructors' occupational background in preparing individuals for the horticulture trade. Data were collected regarding the extent to which graduates perceived they were prepared for employment and the extent employers perceived the graduates were prepared for employment. Subjects in the study were limited to individuals that had received instruction in greenhouse production and were employed in that trade.

Findings. Overall, the graduates of secondary programs where the teacher had a substantial amount of occupational work experience rated their level of competence in greenhouse production higher than graduates of programs where the teacher had a minimal or limited amount of work experience. Within the specific areas of greenhouse, graduates taught by a teacher with a substantial amount of occupational work experience had higher self-perceived competency ratings in all but two of 13 areas. Employers rated graduates taught by teachers with a substantial amount of greenhouse occupational work experience higher in the following greenhouse production areas: plant pests and pesticide usage, quality and quantity of knowledge and work in greenhouse area, poinsettia production, chrysanthemum production, lily production, and bedding plant production.

LAUFFER, Robert. "Influence of Wildlife Contest Participation On Student Achievement." Master of Education Thesis, 1982, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was initially to determine if there was sufficient interest among Pennsylvania vocational agriculture teachers to warrant the development and implementation of an FFA Wildlife Contest for inclusion in Pennsylvania State FFA Activities Week. Secondly, an FFA Wildlife Contest was pilot tested at the local county level.

Method. In 1979, 56 FFA members participated in the Lancaster County FFA Wildlife Contest. The quasi-experimental portion of the study involved a group of 36 environmental agriculture students from Garden Spot High School. Seven of these 10th-grade students received the treatment of a unit of instruction in wildlife conservation plus participation in a Lancaster County FFA Wildlife Contest. Twenty-nine students received the treatment of an instructional unit, but did not participate in the wildlife contest. An additional 22 tenth-grade students were used as a non-treatment group.

Findings. All 58 students were administered a pretest and posttest. Analysis of covariance was used to adjust posttest scores for differences in pretest score. Analysis of the data for the quasi-experimental portion of the study indicated that students receiving both the treatments (unit of instruction and contest participation) had significantly higher adjusted posttest scores than either the unit only treatment or the no-treatment group. In light of this study, it is recommended that all FFA contests should be continually evaluated and revised. It is also recommended that this type of study be replicated with other FFA contests to gain insight into the educational effectiveness of FFA contests. A comprehensive set of resource materials geared specifically to teaching and preparing students for the State FFA Wildlife Contest should be developed and made available.

LAYTON, Theodore G. "An Evaluation of Delaware FFA Contests by the Vocational Agriculture Teachers in Delaware." Masters of Education Thesis, 1982, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to identify the factors affecting the participation and non-participation in FFA contests by teams coached by Delaware teachers of vocational agriculture having FFA chapters.

Method. All FFA advisors in Delaware, with the exception of beginning teachers having less than one year of experience, were surveyed to obtain responses to questions about 24 state FFA contests. Teachers who coached teams were asked to evaluate the contests, and teachers who did not coach teams were asked to respond as to why they did not participate. The survey instrument included criteria for evaluating each contest on a 1 to 5 scale with 3 being an adequate score. In addition, background information about each teacher and his/her teaching environment was obtained. The information was obtained to test three hypotheses.

Findings. All 24 contests received a rating greater than three. Participation was below 30 percent in one-third of the state contests despite the above adequate ratings. The number one reason for non-participation was "lack of student interest" with "not in my subject area" being the second most frequent response. Evaluation of the contests and testing of hypotheses give a basis for recommendations to improve the level of participation in the Delaware contests.

LEIBY, Robert E. "Utilization of Life Cycle in Making Colorado Potato Beetle Control Decisions." Master of Education Thesis, 1982, The Pennsylvania State University, University Park.

Purpose. The major purpose of this study was to develop a slide presentation to inform potato growers about properly timing foliar insecticide applications to control the Colorado potato beetle.

Method. Data were collected from six Lehigh Valley, Pennsylvania, potato farms over a thirteen week period during the summer of 1981. Five potato plots were sampled at each farm on a weekly basis. The number of Colorado potato beetle eggmasses, larvae and adults were counted in each plot. In addition, the potato growers reported the dates that they had applied foliar insecticides to control the Colorado potato beetle.

Findings. The results indicated that there were two generations of Colorado potato beetles present with the second generation being more severe. The actual timing of most foliar insecticide applications did not appear to coincide with the most practical time for foliar insecticide application. A slide set was prepared to illustrate the importance of properly timing the foliar insecticide applications. This slide set presented information on the life cycle of the Colorado potato beetle. Also, the slide set emphasized the importance of scouting the potato fields for pests and timing the sprays to provide the most cost-effective control.

LEONARD, Colin A. "Characteristics Used by Outstanding FFA Vocational Agriculture Students in Identifying Ornametal Plants." Master of Education Paper, 1982, The Pennsylvania State University, University Park.

Purpose. The need for vocational agriculture students to obtain the skill of plant identification has been generally accented. The question of how vocational agriculture students undertake the plant identification process has not. The answer to this question would allow both teacher and student to maximize both time and effort.

Method. Students competing in the Ornamental Horticulture Contest at the National Future Farmers of America Convention in 1975 and 1976 were the study group. They completed a questionnaire at the completion of the contest explaining how they identified certain representative plants. The plants included on the survey instrument were a representative sample for both the Greenhouse-Floral Design and Nursery-Landscape areas of the National FFA Contests.

Findings. It was determined that the students who placed in the top award group (Gold) used more features and items on and about the plant than did those students who placed in the bottom award group (Honorable Mention). The top award group (Gold) within the greenhouse area of specialization relied on leaves, habit of growth, flowers and stems. The top award group (Gold) within the nursery area of specialization when dealing with summer condition questions (in leaf) relied on leaves, habit of growth, stem and twig. When dealing with winter condition questions (without leaf) they relied on buds, twigs, habit of growth and bark. The hypothesis that the top award group(Gold) would differ in their identification process from the bottom award group (Honorable Mention) identification process was accepted. The hypothesis that all students in the National Ornamental Horticulture Contest would examine the overall plant for identification was rejected.

MAKIN, Richard C. "Instructional Status of Agricultural Mechanics Competencies Needed and Possessed by Teachers of Vocational Horticulture in Pennsylvania." Master of Science Thesis, 1981, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to ascertain if any agricultural mechanics were being taught, whether the competencies being taught should be taught, and the degree of proficiency at which mechanics competencies were being taught.

Method. The study was conducted by surveying vocational horticulture teachers and horticulture businesses. The teachers' responses to the agricultural mechanics competencies centered upon their proficiency while the businesses' responses were related to the importance of the competency for success in their particular enterprises.

Findings. It was found that horticulture teachers in Pennsylvania were in fact teachers of agricultural mechanics; statistical analysis of the data indicated agricultural mechanics being taught at limited levels prior to assigning any importance to the competencies. After importance values were calculated from the business input, it was found that a majority of horticulture teachers was teaching a majority of the "most important" agricultural mechanics competencies. Instruction in agricultural mechanics by vocational horticulture teachers was being provided in the proper mechanics areas. However, instruction at a less than optimum level was being provided in relation to the importance assigned by the horticulture industry. There was a significant difference between teacher proficiency and business importance for 14 of the 15 "most essential" competencies and 18 of the 55 "essential" agricultural mechanics competencies. Although they were teaching the correct mechanics instructional areas, horticulture teachers need to further develop their agricultural mechanics expertise. Secondary objectives of the study dealt with the effect of sex, years of teaching experience, and place of employment on the proficiency levels of the horticulture teachers. Of the three, only six accounted for significant differences in proficiency levels for a majority of the agricultural mechanics competencies. The null hypotheses were rejected for a total of 105 of the 171 competencies. The number of years of teaching experience accounted for rejection of the null hypotheses for only 14 of the competencies; whereas, 28 of the competencies had significant differences for the variable place of employment.

MALLILO, Anthony T. "Agriculture Education Preservice Instruction for Teaching Handicapped Students." Doctor of Philosophy Dissertation, 1982, The Pennsylvania State University, University Park.

Purpose. The study tested the effects of an experimental unit of instruction on preservice teachers' knowledge of teaching handicapped students. It was hypothesized that agricultural education students taught by means of the new unit would score significantly higher on a posttest assessment instrument than students instructed by means of the current unit being utilized in a "Methods of Teaching High School Vocational Agriculture" course.

Method. The study utilized a pretest-posttest control group design during the 1981 summer term with a repetitive measure utilizing a quasi-experimental (non-equivalent control group) design during the 1981 fall term. Data were combined from students enrolled in Agricultural Education 12v during the 1981 summer and fall terms. In toto, there were 22 and 14 preservice teachers in the experimental and control groups, respectively.

Findings. Findings indicated that students taught by means of the experimental unit scored significantly higher on the Preservice Teachers Knowledge of Handicapped Students Assessment Instrument. Additionally, findings indicated no significant differences between (1) posttest scores and selected demographic variables, and (2) observed teaching behaviors for either control or experimental group as measured by the Observation System for Instructional Analysis Instrument.

MARTIN, Robert A. "Implication of Selected Supervisory Techniques To Success of Beginning Teachers of Agriculture." Doctor of Philosophy Thesis, 1981, The Pennsylvania State University, University Park.

Purpose. The study tested the effects of two systems of supervision—product specification and process specification—to the success of beginning teachers of vocational agriculture. Product specification is based on supervision-by-objectives, a student-centered emphasis. Process specification is based on management of the teacher and his/her activities, a teacher-centered emphasis. It was hypothesized that supervisory techniques based on product specifications would be perceived to be more effective.

Method. The study used an experimental, posttest-only control group design. Data consisted of measures from each of the following groups: 28 secondary school supervisors, 28 teachers, and 384 students in 18 comprehensive high schools and ten vocational technical schools in Pennsylvania.

Findings. Findings indicated significant differences in student perceptions of teaching style as measured by the Student Perception of Teacher Style Survey. Additionally, analysis of the subscales of the three supervisory questionnaires indicated significant differences in teacher perceptions in the following areas of supervision: goal commitment, decision-making procedures, emphasis on objectives, challenge, control over resources, knowledge of results and intrinsic rewards. Findings indicated no significant differences in (1) student achievement test scores, (2) supervisor effectiveness scores as rated by teachers on the Likert Profile of a School Survey for school supervisors, (3) supervisor behavior ratings as perceived by teachers on the Supervisory Behavior Description Questionnaire for supervisors, (4) supervisor effectiveness ratings regarding goals and objectives as perceived by teachers on the Job Objective Questionnaire, and (5) supervisor effectiveness scores obtained by self-rating using the three instruments.

MONAHAN, John E. "An Assessment of Pennsylvania Milkers' Schools by County Agent Instructors." Master of Education Paper, 1982, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to gather and analyze the opinions of participating Cooperative Extension county agent instructors concerning selected aspects of a newly designed series of milkers' schools. The assessment determined the strengths and weaknesses of the program and developed recommendations for future milkers' school modifications. This assessment provided information useful in determining the need for conducting additional instructor training sessions and to update or improve upon the audio/visual materials used.

Method. A three part questionnaire was developed to survey the Cooperative Extension county agent instructors participating in the 1982 Pennsylvania State University Milkers' Schools. Returns on the mailed questionnaire were received from 88.2 percent of the sample. The survey instrument consisted of 77 questions and was designed to determine how well the instructors thought the educational sessions were conducted and what areas the instructors believed needed to be modified for future milkers' schools. Instructors were asked to respond on a Likert-type scale to a series of statements.

Findings. This assessment showed that the newly designed series of milkers' schools allowed dairy specialists to provide more schools, cover more counties, and reach a larger audience of interested dairy farmers by training county agents to teach at the county level. Findings of this study were: (1) An additional instructor training seminar should be scheduled and the emphasis placed on the three sessions; (2) The three sessions, The Physiology of Milk Secretion, Mastitis, and The Development of the Mammary Gland should be carefully reviewed in an effort to modify the difficulty of these concepts; (3) Revision of the audio/visual materials should be made; (4) Encourage county agents to make better use of the self-test before and after the milkers' school; and (5) A follow-up evaluation from the dairy farmer participants should provide additional input for planning future schools.

OGLINE, Philip Henry. "An Analysis of Hunter Attitudes Toward the Safe Use of Firearms." Doctor of Philosophy Dissertation, 1981, The Pennsylvania State University , University Park.

Purpose. The purpose of this study was to investigate Pennsylvania hunters' attitudes toward safe firearm handling concepts and to determine the relationships of these attitudes with the hunters' accident records. The study also was designed to develop profiles of Pennsylvania hunting accident victims-known offender, victims-unknown offender, victims-self inflicted, accident-offenders, and accident-free hunters.

Method. A random sample consisting of 420 Pennsylvania hunters was selected to participate in this study. They were asked to identify their attitudes toward selected firearm safety concepts. The selected firearm safety concepts were defined as recognized safe operating rules or practices in handling firearms. Twenty-two visuals with captions and 17 written statements, both with a Likert-type scale, were used to collect the attitudinal data. The five-point Likert scale measured each respondent's extent of agreement or disagreement to each of the safety concepts. The attitudinal instruments used in this study were developed with the aid and cooperation of a Research Advisory Council. In addition, a jury of 34 respondents served as a field test for the survey forms. An internal consistency analysis using the Kuder-Richardson program yielded a reliability coefficient of .84 for the visuals with captions. The internal consistency for the attitude statements was .86.

Findings. The attitudinal instruments indicated that the 267 respondents had positive attitudes toward safe firearm handling concepts regardless of their accident record. It was concluded that Pennsylvania hunters who had been involved in hunting accidents expressed similar attitudes toward safety after the occurrence of the accident as accident-free hunters. In addition, hunters' expressed attitudes did not differ significantly regarding hunting safety when analyzed by age, residence, or years of hunting experience.

PIERSON, Timothy G. "The Need, Development, and Evaluation of Task Instruction Sheets for Chain Saw Safetly, Operation, Maintenance, and Repair." Master of Education Paper, 1982, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to determine the status and the need for instructional materials on chain saw safety, operation, maintenance, and repair and if the need existed to develop and evaluate a series of task information sheets on chain saws.

Method. A postcard survey was conducted including all (372) Pennsylvania vocational agriculture teachers to determine the status of chain saw instruction and the need for instructional materials in vocational agriculture programs in Pennsylvania.

Findings. The results of the survey indicated a need for instructional materials and a task analysis concerning chain saw safety, operation, maintenance, and repair was conducted. Thirty-nine tasks were identified and 21 task instruction sheets on chain saws were developed. The task instruction sheets were evaluated using vocational agriculture teachers attending an inservice workshop. A 12-item Likert-type evaluation form was used to determine the usefulness of the task instruction sheets. It was concluded that the teachers found the content of the task instruction sheets safe, comprehensive, readable, and accurate. The teachers perceived the task instruction sheets to be useful and effective in teaching chain saw safety, operation, maintenance, and repair.

RAGON, Phillip C. "A Discussion of Attached Solar Greenhouses For Home Heat and Food Production In Pennsylvania." Master of Agriculture Paper, 1981, The Pennsylvania State University, University Park.

Purpose. The purpose of this paper was to determine the effectiveness of an attached solar greenhouse for home heat and food production in Pennsylvania.

Method. Data for the paper were collected from previous research studies. This investigator's estimations about heat production for home use, using an attached solar greenhouse, are based on mathematical calculations and are only an estimate of what may be expected.

Findings. Based on the information presented in this paper and references used, it is the opinion of the investigator that an attached solar greenhouse can be used to provide supplemental heat and food to a home in Pennsylvania. The amount of either heat or food that can be produced is highly variable depending upon design, location, weather, management of the greenhouse, and other factors already discussed. An attached solar greenhouse is not the answer to all winter heating bills or grocery bills. However, it is the opinion of the investigator that, given all conditions favorable, as far as design, weather, location, etc-.., an attached solar greenhouse can help reduce winter fuel bills and provide a source of fresh vegetables. If energy costs continue to climb, the attached solar greenhouse will become more and more favorable in the future.

REYNOLDS III, Arthur E. "Development and Evaluation of a Multicylinder Gasoline Engine Unit of Instruction with Task Sheets." Master of Education Thesis, 1981, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to develop and evaluate an instructional unit for multicylinder gasoline engines. The unit was designed to be used by vocational agricultural mechanics teachers with minimum experience and expertise in teaching multicylinder gasoline engine theory and practice.

Method. The instructional unit consisted of a teacher manual and a student manual. The teacher manual contained pertinent terms, equipment and procedures to be used by the instructor. The student manual contained individual tasks for the complete disassembly, inspection, identification, reassembly and starting of a six cylinder gasoline engine. A jury of vocational teachers field tested and evaluated the complete instructional package. Recommendations of this jury were considered during the final development stages of the package. One hundred and eight vocational agricultural mechanics students were involved in the study.

Findings. Conclusions as a result of this study were: (1) The unit of instruction developed was an effective method of teaching hands-on multicylinder gasoline engine mechanics to first year vocational agricultural mechanics students, (2) Student achievement was not significantly affected by age, area of residence, grade level or school year, (3) Student achievement was significantly affected by level of previous experience, career goals and leisure time activities. Students with mechanics related career goals, leisure time activities and some experience scored higher on both the pre and posttests.

SATILLO, Pedro Francisco Rodriguez. "Rural Education in Venezuela: A Case Study of the Community of Agua Negra." Master of Agriculture Paper, 1980, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to examine rural education in Venezuela generally, and more specifically through a case study of the community of Agua Negra in Barinas State (Venezuela). This examination was directed toward awakening national concern for establishment of an adequate educational system for the "rural sector" and for the rural resident.

Method. The population for the case study in this examination of rural education consisted of 623 students and 34 teachers in the 2 schools located in the community of Agua Negra. Both students and teachers were surveyed to obtain biographical data relative to age, sex, educational level, goals and expectations, and home environment. Types of teaching material, agricultural resources and instructional facilities were also studied.

Findings. The following were among the major findings of this study: (1) Nearly 60 percent of the 623 students enrolled in grades 1 and 6 of the basic common cycle, are between 15 and 18 years of age. This age range indicates that a number of these students are academically behind the norm in these two schools, (2) While 68 percent of the students' parents were engaged in production agriculture, only 25 percent of the students expressed an interest in being involved in activities within the agricultural

sector after finishing school, (3) In general, supervision, evaluation and registration of students are carried out equally in rural and urban areas, (4) Over 85 percent of the teachers in the two rural schools studied live outside Agua Negra, thus creating a high degree of teacher absenteeism during 4 day weekends, (5) Teachers in the two schools studied had 1 to 5 years teaching experience (85.3 percent) and are between the ages of 23 to 27 years, (6) Teachers in these schools are nearly equally divided between male (56 percent) and female (44 percent), (7) All of the teachers surveyed have received some types of professional improvement courses beyond basic teacher education while 67.6 percent participated in the revised program. (The curriculum is revised each year according to the needs of the rural sector.), (8) Ninety percent of the teachers surveyed are discontent with teaching in the rural area because of a lack of sufficient monetary as well as other incentives (e.g., living conditions, transportation), (9) About 75 percent of the teachers indicated that the current educational programs are not adapted to rural education and its demands because they lack the necessary teaching and production materials and tools. Others said that basic laboratory and field installation, financial assistance and working equipment are lacking, and (10) Of the female students registered in the agriculture and teaching areas, 12.6 percent selected agriculture and 87.4 percent enrolled in teaching.

SEDLAK, Michael A. "Guidelines for Constructing Greenhouses for Pennsylvania Vocational Program." Master of Education Thesis, 1982, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to establish guidelines for the construction of efficient and safe greenhouse facilities for secondary vocational horticulture programs in Pennsylvania. These guidelines are intended to complement the existing research and recommendations available.

Method. The study surveyed 67 vocational agriculture instructors identified by the Pennsylvania Department of Education who are teaching full-time horticulture curriculums. The instrument was designed to survey three major areas: the relationship of the greenhouse to the type of program and to the student learners, the general construction characteristics of the greenhouse, and the safety of the greenhouse in terms of its physical construction. The instrument was reviewed by a three-member screening committee consisting of two full-time horticulture teachers and one general agriculture teacher. As a result of the screening, the final instrument contained 37 questions directly related to the major areas of investigation, and was designed to allow the same question to be applied to more than one greenhouse at the same institution. The questionnaires were mailed to the population along with a return envelope. Those not responding after a two-week period were sent follow-up letters and a second instrument. Forty-five teachers, 67 percent of the population, responded.

Findings. The results were compiled and the following conclusions were made. Most greenhouses being used in secondary vocational horticulture programs were (1) adequately serving the student needs in terms of physical construction and size, (2) being used to their fullest potential, and (3) not constructed with adequate safety considerations. Based on these findings, 21 guidelines were recommended for consideration in the construction of a new greenhouse facility.

SIMMONS, Joel T. "The Effect of A Floral Merchandising and Design Record Book on Student Achievement." Master of Science Thesis, 1982, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to field test a floral merchandising and design record book. The relationships between the use of the record book and student achievement in producing a profit-making floral design and in cognitive development were examined.

Method. The design chosen for the study was a modified separate-sample pretest-posttest design. The sample for this study included the horticulture students of eight high schools and area vocational-technical schools with horticulture and floriculture departments in southeastern Pennsylvania. Ten schools were contacted by telephone and eight met the criteria. All eight schools were used in the study; the schools were randomly assigned to one of the two levels of the treatment. Four classes received the Floral Merchandising and Design Record Book and four posttests; four classes received only the teachers' traditional instructional materials and four posttests.

Findings. The principal conclusion of the investigation was that the Floral Merchandising and Design Record Book was effective in helping students obtain a higher floral design income. The results supported the belief that the students who received the Floral Merchandising and Design Record Book would score higher on a practical floral design income test than students who received only the teachers' traditional instructional materials.

STICKLE, Thomas A. "An Investigation of Selected Approved Practices for Deer Propagation." Master of Education Paper, 1981, The Pennsylvania State University, University Park.

Purpose. The purposes of this paper were to identify: (1) the laws associated with confinement raising of whitetail deer in Pennsylvania; (2) what practices propagators in Pennsylvania currently are using for herd fencing, feeding, breeding and herd health; and (3) what practices are appropriate for raising deer in confinement throughout the state.

Method: The method used to determine current practice of Pennsylvania deer propagators was the development and use of a questionnaire to survey the 103 licensees in Pennsylvania, from whom 31 responses were received.

Findings. A review of the scientific literature on raising deer in confinement and application of the findings therein resulted in recommending that the following practices be used in Pennsylvania deer propagation: (1) the use of safety fence such as sheep netting for fawns; (2) the use of New Zealand type fencing for red deer; (3) the use of cow's milk as the best substitute for doe's milk; (4) the use of free choice feeding methods, using deer rations meeting specifications developed with The Pennsylvania State University research herd; (5) the use of antler size to determine the health of mature bucks; (6) the application of ruminant nutrition practices to deer management; (7) including range feeding in preserves with minimal undergrowth; (8) providing natural browse; (9) for breeding, the maintenance of a buck-doe ratio of 12-15 does per buck, to achieve the optimum fawning rate of 200 percent (the evidence on buck-doe ratios is somewhat inconclusive); (1) for artificial breeding, the use of procedures followed for cattle; and (11) the injection of diethylcarbamizine as treatment for lungworms, prevalent among young deer.

STOVER, Ward M. "A Regional Leadership Development Program: A Case Study of Armstrong and Indiana Counties, Pennsylvania." Master of Education Paper, 1981, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to examine the levels and types of respondents' participation in organizations and their involvement in community activities before and after a county leadership development workshop.

Method. The study focused on the Armstrong-Indiana Counties Leadership Development Workshop. The workshop, held from January 20 to April 21, was the result of program direction provided by the Indiana County Extension Study Committee. Thirty-eight participants enrolled in the workshop that focused on public issues.

Findings. Even though the findings did not produce strong statistically significant support for the expected findings, the trend was in the anticipated directions. Moreover, there were logical and consistent answer patternings derived from the analysis of data. Finally, personal observation supports these findings in that several participants currently hold significant leadership positions within a variety of volunteer organizations, agencies, and governmental bodies at county, state, and national levels.

STUTZMAN, James C. "The Development of a Course of Study Integrating Career Planning Activities with Agricultural Production for a Junior High Program at Meyersdale Area School District." Master of Education Paper, 1982, The Pennsylvania State University, University Park.

Purpose. Objectives of this paper were: (1) to construct an effective course of study; (2) to aid students in developing job briefs or information for a comprehensive brief; and (3) to help students and teachers recognize success is not a point in time, but a journey throughout life. Most emphasis was placed on integrating vocational and career education.

Method. An assessment of current knowledge in occupations and related technical knowledge is an essential part of instruction. Hence, a test of this nature was developed as part of this course of study. The pretest was designed to evaluate the knowledge of career development and agricultural production the students possessed at the beginning of the course of instruction. The posttest provided an immediate evaluation of the effectiveness of the course of study.

Findings. A comprehensive course of study that included teachers' unit and lesson plans was constructed. The following list of subjects was developed into unit and lesson plans for animal production: dairy, beef, sheep, swine, poultry, and horses. Each of these units included the following areas of investigation: identification of breeds, selection of livestock, breeding livestock, feeding livestock, sanitation practices, housing techniques, and marketing methods. By taking one of the six units at a time, incorporating all seven areas of investigation, and integrating career information, a satisfactory lesson plan was constructed for animal production.

Using the same procedure for plant production, it was possible to identify the topics for unit plans. Following is a list of topics selected for unit titles in plant production: field crops, vegetables, and fruits and nuts. Each of these three units included these eight areas of investigation: identification of seeds and/or plant, selection of varieties, method of establishment, nutritional requirements, pest control, storage requirements, and marketing techniques. Taking each of the three topics at a time, and utilizing all eight areas of investigation, plus integrating career development information, a dynamic lesson plan was designed for plant production.

THOMPSON, Dale E. "Recommendations for Arkansas Vocational Agriculture Program Improvements Based on Perceptions of Superintendents, Vocational Agriculture Teachers and Vocational Agriculture Students." Doctor of Philosophy Dissertation, 1982, The Pennsylvania State University, University Park.

Purpose. The major purpose of this study was to identify and describe perceptions of selected groups toward Arkansas vocational agriculture programs. Areas investigated in this study were the total vocational agriculture program, Future Farmers of America, supervised occupational experience, and the primary goals and objectives for vocational agriculture. A secondary purpose of the study was to investigate relationships between the perceptions of the group and selected personal, educational and occupational characteristics.

Method. The 20 percent stratified random sample for this study consisted of clientele groups selected from secondary schools offering vocational agriculture in Arkansas. Data were collected from the superintendents, vocational agriculture teacher, and three vocational agriculture students at 50 of the 241 Arkansas schools offering vocational agriculture. Analysis of variance (ANOVA) was used to determine if a significant difference existed between clientele group perceptions. The Duncan's Multiple Range test was used to identify where significant differences occurred. Omega squared was used to identify practical differences.

Findings. Four hypotheses were formulated and tested. The major results of the study revealed that clientele groups had significant and practical differences in perceptions regarding the total vocational agriculture program, FFA, SOE, and the primary goals and objectives of vocational agriculture. The major factor which affected group perceptions regarding all areas of the vocational agriculture program was their perceptions of the primary goals and objectives of vocational agriculture. Few of the personal, educational and occupational characteristics affected perceptions.

WAGNER, Samuel R. "The Development and Evaluation of a Series of Modules in the Operational Level of Small Gasoline Engines." Master of Education Thesis, 1981, The Pennsylvania State University, University Park.

Purpose. The purposes of this study were to develop and evaluate a series of small gasoline engine modules that could be used in vocational agricultural classes.

Method. Vocational agricultural teachers at three schools agreed to pretest, teach ten modules, and posttest with their vocational agricultural classes. Also, a jury of experts agreed to review all 20 modules and complete an evaluation form. The information from these two sources was used to compile data and suggest revisions in the modules.

Findings. It was found that learning took place as the ten modules were tested. Both the score means and paired t-test scores indicated that the students learned. The jury of experts rated all 20 modules high. This is an indication that the modules will be useful in vocational agricultural classes.

WATERS, Randol G. "Objectives for Collegiate FFA Chapters in Agricultural Teacher Education Programs, A Delphi Study." Master of Science Thesis, 1982, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to establish a set of objectives to be used for organizing collegiate chapters of the Future Farmers of America sponsored by teacher education programs in agriculture.

Method. The Delphi Technique was used to identify these objectives. A panel of experts was identified by randomly selecting collegiate FFA chapters from a national collegiate organization directory. The panel was sent a series of three questionnaires. Each questionnaire was developed using responses gathered from the preceding one.

Findings. A set of 45 objectives was developed and rated by the panel. Mean scores for the ratings were computed in order to determine the importance of each objective. Standard deviations were computed to determine consensus among panel members. The original 45 objectives were grouped into five major categories: (1) FFA advisor skills development, (2) personal development, (3) organizational support, (4) service activities, and (5) social growth. It was found (based upon an average response rate of 66 percent) that those identified as "FFA Advisor Skills Development" and "Personal Development" objectives were the most important objectives for collegiate FFA. It was also found that "Organizational Support" and "Service Activities" were considered as having above average but not as much importance as the first two categories. "Social Growth" objectives were rated important by the panel; however, fewer objectives were identified in this category than in the other four.

TEXAS

HERRING, Don R. and Curry, Thomas L. "Follow-up of Graduates in Agricultural Education from Texas A&M University Employed in Non-school Settings, 1976-1980." Staff Study, 1982, Texas A&M University, College Station.

Purpose. The two-fold purpose of this study was to determine employment patterns of graduates in agricultural education from Texas A&M University employed in non-school settings and to determine their perceptions of the curriculum at Texas A&M with respect to their occupational needs.

Method. Current addresses of graduates for the years 1976 to 1980, whose current employment was in non-school settings, were secured from departmental records and from the Texas A&M University Association of Former Students. Data were gathered through a closed form questionnaire. An eighty percent response (169 of 211 graduates) was obtained from three mailings of the coded questionnaire. Descriptive statistics, analysis of variance, and chi-square were used to analyze the data.

Findings. Major findings include: (1) The occupational areas in which graduates were employed included public agricultural agencies (20.1%), agribusiness (16.6%), production agriculture (14.8%), non-agricultural occupations (29.0%) and "other" (19.5%), which consisted primarily of graduate school and military service; (2) Most scientific agriculture courses were perceived as being above average in helpfulness by graduates relative to their employment status, as were courses in Mathematics, English and Biology; (3) Of all the curriculum factors, the student teaching experience was viewed as most helpful to graduates relative to their employment status; (4) participation in Collegiate FFA and other professional organizations was considered to be helpful to graduates; (5) those course areas requiring business related skills (management, finance, and business law) were considered to be helpful by a majority of graduates, as was speech; (6) a field experience was considered to be preferable to a student teaching experience by a majority of graduates; (7) graduates employed in agricultural occupations generally did not differ significantly in their perceptions of the value of agricultural courses but they did differ from the perceptions of those employed in non-agricultural occupations; and (8) graduates generally did not differ significantly among their occupational areas with regard to their perceptions of the value of non-agricultural course areas.

VIRGINIA

GARRISON, James M. "Student Misbehavior in Vocational Agriculture: A National Study." Doctor of Education Dissertation, 1982, Virginia Polytechnic Institute and State University, Blacksburg.

Purposes. The purposes of this study were to determine the level of seriousness with which vocational agriculture teachers view their student behavioral problems and to determine if differences exist in the perceived level of seriousness held by teachers grouped by: degree held, sex of teacher, grade level taught, years of teaching experience, region of country, setting of school, school size and number of teachers in department.

Methods. A random selection of all vocational agriculture teachers was mailed the Student Misbehavior Survey. Follow-up reminders, mailings and calls resulted in a usable return rate of 72%. Data analysis techniques included common factor analysis with verimax rotations, MANOVA, ANOVA, product-moment correlations, and standard item analysis techniques.

Findings. Major findings include: (1) Student attitude problems are perceived by vocational agriculture teachers, to be more serious than other types of student behavioral problems; (2) Relatively severe or grievious types of student misbehaviors, such as rape, assaults on school personnel, use of hard drugs, and selling drugs, present little or no problem to teachers of agricultural education; (3) Senior high school teachers of vocational agriculture perceive student attitude problems to be less serious than do vocational agriculture teachers who work with younger students; (4) Vocational agriculture teachers in NVATA Region 1 perceive use of drugs to be a more serious problem than do teachers in NVATA Region 4; (5) Vocational agriculture

teachers in schools of over 2000 enrollment perceive use of drugs to be more serious than do teachers in schools with enrollments of less than 2000; (6) Problems with student attitude seem to diminish somewhat as the number of years of teaching experience increase; (7) George Gallup and many others notwithstanding, student misbehavior does not appear to be a major problem for vocational agriculture teachers, in general.

HERRIN, Ray V. "Factors Associated With the Success of Participants in the 1981 National Future Farmers of America Livestock Judging Contest," Doctor of Education Dissertation, 1982, Virginia Polytechnic Institute and State University, Blacksburg.

Purpose. The purpose of this study was to determine the factors that were associated with the success of those teams that participated in the 1981 National FFA Livestock Judging Contest. A secondary purpose of the study was to determine the attitudes of both the contestants and their advisors regarding the contest.

Method. A questionnaire was developed to survey the forty four advisors and 109 contestants at the 1981 National FFA Livestock Judging Contest. The questionnaires were distributed to the contestants competing in the national contest.

Findings. The factors associated with the success of participants in the 1981 National FFA Livestock Judging Contest were: teams who spent the most time preparing for the contest tending to score higher; teams with advisors who had fewer years of teaching experience tended to score higher; teams from states with high populations of cattle, hogs, and sheep tended to score higher; and those teams who entered more livestock judging contests tended to score higher.

HUDSON, C. Jordan. "The Role of the Agricultural Education Teacher in the Young Farmer Program of Virginia." Staff Study, 1982, Virginia State University, Petersburg.

Purpose. The purpose of this study was to determine the most effective procedures being used by agricultural education teachers in conducting young farmer programs in Virginia.

Method. A questionnaire containing 111 procedures was developed and administered to 83 young farmer teachers. This number of teachers represented approximately 80 percent of the Virginia departments with young farmer programs. The procedures were classified under five categories, (1) locating and enrolling, (2) determining instructional needs, (3) planning instructional programs, (4) providing instruction and (5) evaluation. The teachers rated the procedures they had used as being very effective, above average, average, below average or not effective. The procedures in each category were ranked according to their mean effectiveness scores.

Findings. A total of 103 procedures were rated average or above in effectiveness and were being used by more than 50 percent of the teachers. It was concluded that more experienced agricultural education teachers in Virginia tend to rate some procedures used in conducting young farmer programs at a higher rate of effectiveness than less experienced teachers.

LYONS, Lorenza W. "A Study of Attitudes, Participation, and Knowledge of Flue-Cured Tobacco Producers Concerning The Virginia Cooperative Extension Service." Doctoral Dissertation, 1982, Virginia Polytechnic Institute and State University, Blacksburg.

Purpose. The purpose of this study was to determine the attitudes, degree of participation, and knowledge of both small and large flue-cured tobacco producers regarding the Virginia Cooperative Extension Service.

Method. A randomly selected proportional stratified sample was used to select the 400 producers included in the study. A four-part survey instrument was used to collect data. The mailed instrument was returned by 252 producers (63 percent).

Findings. Major findings include: (1) large flue-cured tobacco producers' attitudes were more positive than the small producers toward the overall agricultural program; (2) large producers participated in more programs of The Virginia Cooperative Extension Service than the small producers; and (3) both small and large flue-cured tobacco producers were knowledgeable of the functions of the Virginia Cooperative Extension Service.

TURNER, Clinton V. "A Systematic Method for Determining In-Service Educational Needs of Agricultural Education Teachers in Cooperative Extension Agriculture Agents in Virginia." Doctor of Education Dissertation, 1982, Virginia Polytechnic Institute and State University, Blacksburg.

Purpose. The purpose of this study was to develop a systematic method to determine the in-service needs of agricultural education teachers and cooperative extension agriculture agents.

Methods. A random sample was drawn from agriculture teachers and extension agents in Virginia to comprise the respondents for this study. The questionnaire was developed from a review of literature on the in-service needs of agricultural educators and the instrument also contained a section where respondents were asked to list the types of in-service education they have participated in, and professional opinions toward in-service education.

Findings. The greatest in-service needs of agricultural education teachers were in the areas of agricultural production and agricultural mechancis. The cooperative extension agricultural agents perceived their greatest needs in the area of agricultural production and horticulture. Extension agents were less positive toward in-service education activities than teachers. It was also found that agriculture teachers have a greater in-service educational needs than agents. It was also found that the systematic method developed for this study was successful in identifying the in-service needs of agriculture teachers and extension agents in Virginia.

WEST VIRGINIA

BOONE, Harry N., Jr. "A Study to Determine the Influence and Importance of Cooperative Vocational Education in Agricultural Sales and Service Training on Students' Careers at Greenbrier East High School as Perceived by Graduates of the Program." Master of Science Thesis, 1982, West Virginia University, Morgantown.

Purpose. The purpose of this study was to determine the importance and influence of the cooperative vocational education program in agricultural sales and service on students' careers at Greenbrier East High School.

Method. Questionnaires were prepared and sent to each graduate of Greenbrier East High School who had participated in the cooperative vocational education program in agricultural sales and service.

Findings. Participants felt that each program objective had been of great importance in their training and contributed to their career choices. While 37 percent of the respondents were working in an agriculturally related job, nearly half the farm-reared participants were. Fifty-nine percent of the graduates remained at their training stations for a year or more after graduation from high school. The reason given for leaving agribusiness jobs was for greater wages. Ninety-three percent of the graduates indicated that if they were in high school today, they would enroll in agricultural sales and service.

DLAMINI, Barnabas M. "Evaluation of the Agriculture Program in the Secondary Schools of Swaziland as Perceived by Agriculture Teachers and Headmasters." Master of Science Theses, 1982, West Virginia University, Morgantown.

Purpose. The purpose of this study was to determine if original objectives of Swaziland's school agriculture program were being met and to evaluate various aspects of the secondary and teacher training programs.

Method. Questionnaires were prepared and mailed to all secondary agriculture teachers and headmasters of schools in which agriculture is offered in Swaziland.

Findings. Original objective of the secondary schools' agriculture program are being achieved. There is a need for the present program of general agriculture, a need for separate vocational agriculture classes and a need for an agricultural youth organization as an integral part of the offerings. Present examination methods need to be changed. Teachers' handbooks, audio-visual aids, library books, workbooks, tools and laboratory equipment in schools are inadequate. Preservice and inservice opportunities for teachers must be expanded particularly in areas of agricultural extension, soil science and mechanization.

JALLOW, Saba M. "Perceptions of Farmers and Ranchers Concerning Effectiveness of the Cooperative Extension Service Toward Promoting Agricultural Development." Master of Science Thesis, 1981, West Virginia University, Morgantown.

Purpose. This study was designed to determine effectiveness of local agricultural extension services and competence of local extension agents as perceived by farmers and ranchers.

Method. Prepared questionnaires were mailed to four randomly selected vocational agriculture teachers in each state with a request to forward them to outstanding farmers or ranchers in their communities.

Findings. Age, educational level and type of farm or ranch had little influence on ratings of extension service effectiveness or competence of the local agent. Western region respondents are more uncertain regarding effectiveness of the extension agent than are farmers from other regions. Farmers who are members of their local extension service committees, attend extension-sponsored meetings, and/or are visited frequently by the agricultural extension agent are much more positive in their perceptions of the extension agencies and the extension agent.

MLOZI, Malongo Richard. "Factors Influencing Supervision and Success of Student Occupational Experience Programs as Perceived by Vocational Agriculture Teachers." Master of Science Thesis, 1982, West Virginia University, Morgantown.

Purpose. The purpose of this study was to determine problems which prevent the proper supervision of occupational experience programs as perceived by teachers of vocational agriculture in West Virginia.

Method. Questionnaires were prepared and mailed to West Virginia vocational agriculture teachers. Analysis of data was based on frequencies and means within and between groups.

Findings. Vocational agriculture teachers' belief in importance of supervised occupational experience programs and in their own ability to supervise were not considered problems preventing proper supervision. Excessive paperwork, few farm students in vocational agriculture, excessive numbers of students and family demands on time were perceived to diversely influence supervisory efforts.

O'DELL, Irvin Dwayne. "Problems Which Restrict the Success of Agricultural Mechanics Programs as Percieved by West Virginia Vocational Agriculture Teachers." Master of Science Thesis, 1982, West Virginia University, Morgantown.

Purpose. The purpose of this study was to determine problems that West Virginia vocational agriculture teachers feel most seriously restrict the success of agricultural mechanics programs.

Method. A modified delphi approach was used to elicit desired information. A request was mailed to teachers asking them to identify the five major problems which, in their opinions, most seriously restrict success of their agricultural mechanics programs. Statements returned were scrutinized, edited and combined and formed a 57 item questionnaire. Each teacher was then asked to rate degree of severity of each problem identified as it pertains to his/her own situation.

Findings. The most serious problems which hinder success of agricultural mechanics programs are related to inadequacies in space (floor space, project storage space, supply storage space) and funding (expendables, project supplies, tools, equipment, etc.). Major inadequacies exist in teacher knowledge or skills in the areas of farm machinery and tractors. Excessive numbers of students in classes, mixing of grade levels and using the program as a place to dispose of low-quality students are practices which adversely influence program success.

SENDEU, Daniel S. "Perceived Problems of Newly Employed County Agricultural Extension Agents." Master of Science Thesis, 1982, West Virginia University, Morgantown.

Purpose. The primary purpose of this study was to assess the professional education competencies of newly employed county agricultural extension agents as perceived by directors of Cooperative Extension Service and presidents of County Extension Agent Associations.

Method. A survey instrument consisting of 76 professional education competencies was mailed to directors of CES and CEAA presidents across the United States. Means and standard deviations were determined for each competency category and statement, and further examined by respondents' region and position.

Findings. Newly employed county agricultural extension agents are perceived to be poorly informed about the structure and function of the organization of the Cooperative Extension Service. They are perceived to have limited competence in areas relating to extension teaching methods, program planning, leadership development, evaluation and administrative duties. They are considered somewhat more competent in program execution, communication skills, farm and home visits and community relations. Southern region participants were particularly critical of competencies held by newly employed agents.

STUTLER, Tracy K. "Public Perception of Farmland Loss and Protection in Berkeley County, West Virginia." Master of Science Thesis, 1982, West Virginia University, Morgantown.

Purpose. Primary objectives of this study were to determine if residents of Berkeley County, WV, realized that their county was losing farmland acreage and to log their opinions concerning possible preservation efforts.

Method. Stratified random sampling was used to provide names of individuals from two populations to participate in the research. Twenty-five full-time farmers and 58 members of the general public contributed data through telephone interviews.

Findings. Farmers and the general public are in agreement that farmland acreage in Berkeley County has decreased in the last ten years. They also agreed that loss of farmland is not in the public interest and that something should be done to prevent further loss. Nearly three-fourths of the participants in each group prefer that any farmland preservation action be designed to allow owners to choose whether or not to participate. There is a substantial degree of uncertainty regarding an equitable method of farmland preservation.

STUDIES IN PROGRESS, 1981-1982

FLORIDA

ARRINGTON, Larry R. "Appraisal of Participant Satisfaction with the Competencies Developed in Vocational Agricultural Programs and the Relationship of Satisfaction with Student, School and Program Barriers." Staff Study. University of Florida, Gainesville.

CHEEK, Jimmy G. and MCGHEE, M. B. "Student-Teacher Morale and Its Relationship to Selected Factors." Staff Study, University of Florida, Gainesville.

CHEEK, Jimmy G. and MCGHEE, Max B. "Assessment of Competencies Possessed by Students Completing Applied Principles of Agricultural Occupations." Staff Study, University of Florida, Gainesville.

MCGHEE, Max B. "Knowledge and Awareness of Low Energy Technology Activities in Agriculture by Professional Agriculturalists." Staff Study, University of Florida, Gainesville.

MCGHEE, Max B. and CHEEK, Jimmy G. "Assessment of Competencies Possessed by Students Completing Fundamentals of Agricultural Occupations." Staff Study, University of Florida, Gainesville.

WALTZ, Freddie C., Arrington, Larry R., Cheek, Jimmy G., and Beeman, Carl E. "Identification of Recruitment Barriers to Vocational Training Programs as Perceived by Students, Teachers, Counselors, and Administrators in Selected Florida Schools", Phase II, Staff Study, University of Florida, Gainesville.

IDAHO

CRAWFORD, Terry L., and Foster, Richard M. "Factors Which Indicate Vo Ag/FFA Program Quality in Idaho as Perceived by Principals and Vocational Agriculture Instructors." A Staff Study, University of Idaho, Moscow.

FEDALE, Scott V. "Using Media Packages in Extension Staff Training." A non-thesis research project, University of Idaho, Moscow.

FOSTER, Richard M. "Characteristics of Freshmen and Transfer Students Entering the College of Agriculture, 1982-83." College of Agriculture study, University of Moscow,

HOYT, Kenneth D., and Foster, Richard M. "Idaho Vocational Agriculture Curriculum Guide in Crop Production." A Staff Project, University of Idaho, Moscow.

HOYT, Kenneth D., and Foster, Richard M. "Development of a Prototype Solar Fruit/Vegetable Drier for Introduction at the Village Level in Developing Sub-tropical Countries." A Staff Study, University of Idaho, Moscow.

NAUMAN, Jeff C., and Foster, Richard M. "Employment Factors Considered Important in Hiring a Beginning Teacher of Vocational Agriculture in Idaho." A staff Study, University of Idaho, Moscow.

RIESENBERG, Louis E. "Tractor Efficiency Testing Clinics in Idaho." A staff study in conjunction with SBVE and Agricultural Engineering Department, University of Idaho, Moscow.

RIESENBERG, Louis E., Dowding, Edwin, and Moden, Walter Jr. "Investigation of Lentil Harvesting Losses." A staff Study, Ag Engineering Department, University of Idaho, Moscow.

ILLINOIS

HEMP, Paul E. and COURSON, Roger L. "Illinois Core Curriculum in Agriculture. (Phase IV), Staff Study, University of Illinois at Urbana-Champaign.

LAW, Dale A. "County Extension Advisers' Self-Perception of Job Competence, Job Satisfaction, and Need for Additional Training in Relation to Job Duties and Selected Demographic Characteristics." Doctor of Education Dissertation, University of Illinois at Urbana-Champaign.

OSBORNE, Edward W. "Relationship Between High School Vocational Agriculture Course Patterns and Involvement of Students in SOEP's and the FFA." Staff Study, 1982, University of Illinois at Urbana-Champaign.

OSBORNE, Edward W. "Crop Production Skills Taught in Vocational Agriculture classes and Possessed by Current and Prospective Illinois Agricultural Production Teachers." Staff Study, 1982, University of Illinois at Urbana-Champaign.

RUSSELL, Earl B., HARRIMAN, Lynda, and PEPPLE, Jerry D. "Factors Related to the Change Orientation of Illinois Teachers of Agriculture and Home Economics." Staff Study, University of Illinois at Urbana-Champaign.

RUSSELL, Earl B. "Change Orientation of Personnel Involved in Dissemination in Vocational Education." Staff Study, University of Illinois at Urbana-Champaign.

RUSSELL, Earl B. and EVANS, Rupert N. "National Study of Support for Vocational Teacher Education." Staff Study, University of Illinois at Urbana-Champaign.

RUSSELL, Earl B. "Agricultural Skills Needed by Student Teachers." Staff Study, University of Illinois at Urbana-Champaign.

INDIANA

MARTIN, Robert A. "The Professional Education Competencies Needed by Extension Agents in the Indiana Cooperative Extension Service." Staff Study, Purdue University, West Lafayette.

MARTIN, Robert A. "Perceptions of Beginning Vocational Agriculture Teachers and School Administrators Regarding Communications and Support for Vocational Agriculture." Staff Study, Purdue University, West Lafayette.

PETERS, Jerry L. "The Sequencing Effects of Two Methods of Laboratory Teaching Experience on Students' Teaching Performance and Attitudes Toward Teaching." Staff Study, Purdue University, West Lafayette.

IOWA

ANDERSON, Craig. "Programs of Agriculture in the System of Higher Education in Costa Rica." Doctor of Philosophy Dissertation. Iowa State University, Ames.

CARTER, Richard I. "Characteristics of Entering Students in the Agricultural Education Department." Staff Study, Iowa State University, Ames.

CARTER, Richard I. "The Role of Youth Organizations for Students Interested in Agricultural Careers." Staff Study, Iowa State University, Ames.

CLASING, Kevin R. "Survey of Microcomputer Usage in Vocational Agriculture in Iowa." Master of Science Thesis, Iowa State University, Ames.

FLETCHER, Gregory W. "Employers' Perceptions of Agribusiness Employment Experience for Vocational Agriculture Students." Master of Science Thesis, Iowa State University, Ames.

GAMON, Julia A. "Experimental Evaluation of Instructional Materials on Delegation for 4-H Youth." Doctor of Philosophy Dissertation, Iowa State University, Ames.

GREEN, James J. "Perceptions of Contestants Participating in Selected National FFA Contests." Master of Science Thesis, Iowa State University, Ames.

JOHNSON, Steven D. "Microcomputer as a Decision-Making Aid in Teaching Farm Management." Master of Science Thesis, Iowa State University, Ames.

JOHNSON, Christine A. "Components of Leadership Development Through 4-H Programs and Their Implementation." Master of Science Thesis, Iowa State University, Ames.

JOHNSON, Wesley W. "FFA Participation and Personal Development on Iowa Farmer Degree Recipients." Master of Science Thesis, Iowa State University, Ames.

KLEIN, Wayne C. "High School Participation and Personal Development as Perceived by Freshmen in the College of Agriculture." Master of Science Thesis, Iowa State University, Ames.

MEMON, Rajab. "Administrative Management of Agriculture Work Experience Programs at Two-Year Post-Secondary Institutions of Iowa." Master of Science Thesis, Iowa State University, Ames.

MILLER, W. Wade. "A Survey of the Use of Computers in Iowa Secondary and Post-Secondary Agriculture Programs." Staff Study, Iowa State University, Ames.

MILLER, W. Wade. "An Evaluation of the Effectiveness of Video-Cassette Modules in Influencing Students' Perceptions of Selected Teacher Characteristics." Staff Study, Iowa State University, Ames.

NEASON, Anna Beth. "Experimental Evaluation of a Resource Packet on Delegation for FFA Officer Training." Doctor of Philosophy Dissertation, Iowa State University, Ames.

OMER, Mahmoud Hassan. "Competencies in Dairy Production Needed by Farmers of Kuku Cooperative Dairty Society in Sudan." Master of Science Thesis, Iowa State University, Ames.

PILGRIM, David A. "Students' Perceptions of Agribusiness Supervised Occupational Experience Programs in Iowa." Master of Science Thesis, Iowa State University, Ames.

SLOCOMBE, John W. "An Assessment of the Effectiveness of an Instructional Packet on Supervised Occupational Experience Placement Programs for Vocational Agriculture Students." Ph.D. Dissertation, Iowa State University, Ames.

WILLIAMS, David L. "Attitudes of Parents Toward Agribusiness Employment Experience for Vocational Agriculture Students." Staff Study, Iowa State University, Ames.

KANSAS

ALBRACHT, James. "Assess the Needs for Agricultural Instruction to Meet Needs of Rural or Urban Respondents Who Do Not Depend on Their Land for Major Income." Kansas State University, Manhattan.

PARMLEY, John D. "Successes and Problems of First Year Vocational Agriculture Teachers in Kansas." Staff Study, Kansas State University, Manhattan.

PARMLEY, John D. "Develop a Supervised Occupational Experience Handbook for Kansas Vocational Agriculture Teachers." Staff Study, Kansas State University, Manhattan.

LOUISIANA

ABDULMALEK, Abdul Patah bin. "Factors Influencing the Job Satisfaction of Vocational Agriculture in the Southeastern United States." Doctor of Philosophy Dissertation, Louisiana State University, Baton Rouge.

BURNETT, Michael F. "Updating Teaching Materials for Education in Vocational Agriculture." Staff Study, Louisiana State University, Baton Rouge; Funded by the Louisiana State Department of Education.

BURNETT, Michael F. and Harrison, Betty C. "Factors Influencing Vocational Teacher Career Change and Implications for Teacher Education Curricula." Staff Study, Louisiana State University, Baton Rouge; Funded by the Louisiana State Department of Education.

BURNETT, Michael F. and Smith, Charles W. "Selected Characteristics of Secondary Vocational Horticulture Programs in Each of the Four FFA Regions." Staff Study, Louisiana State University, Baton Rouge.

BURNETT, Michael F. and Yahya, Ismail bin. "Role Perception and Factors Influencing the Actual Role of Teachers of Vocational Agriculture in Louisiana." Staff Study, Louisiana State University, Baton Rouge; Funded by the Louisiana State Department of Education.

CAMP, Susan S. "Status of Vocational Agriculture Summer Programs in the United States." Doctor of Philosophy Dissertation, Louisiana State University, Baton Rouge.

GRADY, Thomas L. "The Relationship of Job Performance Ratings and Student Achievement with Job Satisfaction of Louisiana Vocational Agriculture Teachers." Doctor of Philosophy Dissertation, Louisiana State University, Baton Rouge.

HAYNES, Douglas. "Vocational Agriculture Teachers' Perceptions of Selected Educationally Related Factors of Young/Adult Farmer Programs in the Southeastern United States." Doctor of Philosophy Dissertation, Louisiana State University, Baton Rouge.

KOTRLIK, Joe W. "The Effective Use of Advisory Committees in High School Vocational Education Programs." Staff Study, Louisiana State University, Baton Rouge; Funded by the Louisiana State Department of Education.

KOTRLIK, Joe W. "Development of Guidelines for the Summer Phase of Vocational Agriculture Programs." Staff Study, Louisiana State University, Baton Rouge; Funded by the Louisiana State Department of Education.

MARYLAND

COOPER, Elmer L., Clifford L. Nelson, and Ivar D. Holmberg. "Employment and Entrepreneurship Trends in Maryland." Maryland Agricultural Experiment Station, T-32, University of Maryland, College Park.

CORNETT, Terry L. and Elmer L. Cooper. "Agribusiness Employment Needs on the Upper Eastern Shore of Maryland." Field Problem, University of Maryland, College Park.

GILLUS, Delmar L., Elmer L. Cooper, and Clifford L. Nelson. "Farm and Agribusiness Employment Needs in Central Maryland." Master's Thesis, University of Maryland, College Park.

HARROD, Hilton L. and Elmer L. Cooper. "Farm and Agribusiness Employment Needs in Southern Maryland." Master's Thesis, University of Maryland, College Park.

MURPHY, Lisa B., Elmer L. Cooper and Ivar D. Holmberg. "Farm and Agribusiness Employment Needs on the Lower Eastern Shore of Maryland." Master's Thesis, University of Maryland, College Park.

MICHIGAN

SEAHROKH, Daryoush. "A study of the Agricultural Competencies of Senior Vocational Agricultural Students in Michigan Based on their Supervised Occupational Experience Programs." Doctor of Philosophy Dissertation, Michigan State University.

MISSISSIPPI

KITTRELL, David L. "Criteria for Determining County Funding/Contribution Levels for Extension Programs in the Southern Region." Staff Study, Mississippi State University, Starkville.

MISSOURI

ABDEL-REHIM, Saber. "Clientele Perceptions of Agricultural Extension Programs in Missouri." Ph.D. dissertation, University of Missouri-Columbia.

AL-SHENAIFI, Mohammed. "Agronomy Competencies of Extension Workers in Saudi Arabia." Ph.D. dissertation, University of Missouri-Columbia.

BENNETT, Larry. "Safety Program Needs of Missouri Vocational Agriculture Departments." Ph.D. dissertation, University of Missouri-Columbia.

BROOKS, Perry. "Agricultural Mechanics Lessons Taught in Core Curriculums in Vocational Agriculture in Missouri." Ph.D. dissertation, University of Missouri-Columbia.

CASE, Larry. "Factors Affecting the Supervised Occupational Experience Program in Vocational Agriculture." Ed.D. dissertation, University of Missouri-Columbia.

LAMB, William A. "Agricultural Mechanic Facility Arrangement for Maximum Efficiency." Ph.D. dissertation, University of Missouri-Columbia.

MICK, Joseph H. "One and Five Year Placement of Graduates of Vocational Agriculture Programs as Influenced by Their Supervised Occupational Experience Program." Ph.D. dissertation, University of Missouri-Columbia.

STEWART, B. R., CLAYCOMB, D. M., and LINHARDT, R. E. "Animal Science Competencies of University Freshmen Compared to Missouri Young Farmers." Staff study, University of Missouri-Columbia.

NEW HAMPSHIRE

ANNIS, William H. "Determining the Cost/Effectiveness of Three Methods of Conducting Supervised Occupational Experience Programs." Staff Study, University of New Hampshire, Durham.

NEW YORK

BERKEY, Arthur L., CUSHMAN, Harold R., and SUTPHIN, H. Dean. "The Northeast Change Strategy for Supervised Occupational Experience Programs in Agriculture." Staff Study, Agricultural and Occupational Education, Department of Education, College of Agriculture and Life Sciences, Cornell University, Ithaca.

BREECE, Donald J. "The Development of an Instrument to Access the Technical Competency Needs of Agricultural Teachers." Doctor of Philosophy Dissertation, Cornell University, Ithaca.

FERNANDEZ-ALSINA, Mario. "A Synthesis of Evaluation Approaches and Their Possible Application to an Extension Programming System in Argentina." Masters of Science Thesis, Cornell University, Ithaca.

FUATAI, Lafitai. "Curricula for High School Agriculture in Western Samoa." Master of Science Thesis, Cornell University, Ithaca.

GIFFORD, George L. "The Role of Day Part-time Faculty in Selected Up-State New York Community Colleges." Doctor of Philosophy Dissertation, Cornell University, Ithaca.

HOSSEINI, Mahmood S. "A Model for a New Educational-Developmental Institution for Training Rural Developers in Iran: A Needs-Based Design." Doctor of Philosophy Dissertation, Cornell University, Ithaca.

LAHIS, Samuel. "The Institutionalization of Training Programs for Agricultural College Lecturers in Papua New Guinea." Master of Science Thesis, Cornell University, Ithaca.

PENROD, Kathryn M. "Students', Teachers' and Administrators' Perceptions of Occupational Experience Programs in New York State." Doctor of Philosophy Dessertation, Cornell University, Ithaca.

TENNEY, Richard W. and DRAKE, William E. "Developing a Comprehensive Information Management System for Improving the Preparation and Inservice Education of Professional Educators in Agriculture." Staff Study, Cornell University, Ithaca.

TEOH, Chye Hean. "A Prioritization of the Instructional Materials Needs of Teachers of Agriculture in the South Pacific." Doctor of Philosophy Dissertation, Cornell University, Ithaca.

VOCKROTH, Richard W. "A Study of Selected Factors Relating to Retention of Adult Learners in Two-Year Colleges." Doctor of Philosophy Dissertation, Cornell University, Ithaca.

NORTH CAROLINA

ARTHUR, John. "An Appraisal of Participating Experiences of Student Teachers of Agricultural Education at North Carolina A&T State University, Greensboro". Master of Science Study, North Carolina Agricultural and Technical State University, Greensboro.

LAMECK, Dudley. "Effect of Sewage Sludge on Soybean Growth and Chemical Composition: Field Studies". Master of Science Study, North Carolina Agricultural and Technical State University, Greensboro.

NORTH DAKOTA

BOYLE, Dennis M. "Attitudes of North Dakota Vocational Agriculture Instructors Toward Selected Aspects of Future Farmers of America Programs." Master of Science Colloquium Paper, North Dakota State University, Fargo.

DEBERTIN, Richard H. "Teacher Morale of North Dakota Vocational Agriculture Teachers," Master of Science Colloquium Paper, North Dakota State University, Fargo.

FEGERT, Wallace R. "Problems of First Year Vocational Agriculture Instructors in Minnesota, Montana, North Dakota and South Dakota." Master of Science Colloquium Paper, North Dakota State University, Fargo.

FRANZEN, Robert J. "Attitudes of North Dakota Vocational Agriculture Instructors Toward Supervised Occupational Experience Programs." Master of Science Colloquium Paper, North Dakota State University, Fargo.

OHIO

ARNOLD, Truman. "Educational Needs of Part-Time Farmers in Warren County, Ohio." Master of Science Thesis, The Ohio State University, Columbus.

AMBA, Aruk. "Systematic Description of the Agricultural Extension Service in the Cross River State of Nigeria." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

BECKLEY, Bill. "Cooperative Extension Internsbips in the United States." Master of Science Thesis, The Ohio State University, Columbus.

BIGLER, Nancy. "Contributing Factors to Volunteer 4-H Club Leader Retention in Ohio." Master of Science Thesis, The Ohio State University, Columbus.

DILL, Calvin F. "Knowledge, Attitudes and Current Practices of Vocational Agriculture Teachers Concerning the Major Provisions of Public Law 94-142 (The Education for All Handicapped Childrens Act)

DORN, D'Andre K. "Continuing Professional Development of State Supervisors of Agricultural Education." Doctor of Philosophy Dissertation, The Ohio State University. Columbus.

DYER, Patricia A. "The Relationship of Selected Variables to the Morale of Ohio Vocational Agriculture Teachers." Master of Science Thesis, The Ohio State University, Columbus.

FALAKDINE, Darush. "The Mathematical Problem-Solving Ability of Vocational Agriculture Students." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

GUILER, Gilbert S. "An Assessment of New Teachers' Proficiency in the Ten Major Areas of Competency." Staff Study, The Ohio State University, Columbus.

GUILER, Gilbert S. "Analysis and Evaluation of the In-Service Education Program Offered to Teachers of Vocational Agriculture in Ohio during the Past Five Years." Staff Study, The Ohio State University.

GUTHEIL, Kathleen. "Motivators and Vocational Objectives of Students Enrolled in Ohio Vocational Agriculture." Master of Science Thesis, The Ohio State University, Columbus.

HARPER, Joe G. "Factors Influencing Safety Attitudes of Students in Agricultural Mechanization." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

HARRIS, David E. "Teacher Attitudes Toward the Importance of SOE and SOE Supervision and the Relationship of These Attitudes to the Quality of SOE Programs." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

HEDGES, Lowell E. and MILLER, Larry E. "Lesson Plans on Energy Management in Agriculture for Teachers of Vocational Agriculture." Staff Study, The Ohio State University, Columbus.

KOHLS, Sue. "Involving Handicapped Persons in 4-H." Master of Science Thesis, The Ohio State University, Columbus.

KOUZEKANANI, Kamiar. "Extension Education as Perceived by Educators and International Students of Extension Education: A National Study." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

KRILL, Thomas L. "Vocational Agriculture for Adults: Administrator's Perceptions." Master of Science Thesis, The Ohio State University, Columbus.

McCRACKEN, J. David. "Organizational Commitment of Agricultural Educators." Staff Study, The Ohio State University, Columbus.

MILLER, Larry E., CRUNKILTON, John R. and LEE, Jasper S. "Image of Departments/Program of Agricultural Education as Held by Faculty in Colleges of Agriculture and Education." Consortia Staff Study, The Ohio State University, Columbus; Virginia Polytechnic Institute and State University, Blacksburg, Virginia; Michigan State University, East Lansing, Michigan.

MILLISER, Kenneth E. "Motivators of Extension Volunteers." Master of Science Thesis, The Ohio State University, Columbus.

OTO-FRANCE, Abednego. "Perceptions of Selected Extension Groups Concerning the Importance and Extent of Performance of Tasks by Area Agricultural Industries Program Planning Committees." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

PFISTER, Jill A. "An Evaluation of Student Teaching in Agricultural Education at The Ohio State University Regarding Student Teaching Experiences and Performance of University Supervisors and Cooperating Teachers." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

SMITH, Keith L. "A Staff Development Study." Staff Study, The Ohio State University, Columbus.

OKLAHOMA

BEADLES, Alvin R. "Assessments of Characteristics of Enduring Young Farmer Chapters in Oklahoma." Doctor of Education Dissertation, Oklahoma State University, Stillwater.

BRATTON, Cecil. "Expectations of Vocational Agriculture in the Keota Community." Master of Science Report, Oklahoma State University, Stillwater.

DRISKILL, Dewayne C. "Selected Characteristics of the Agricultural Mechanics Programs in the State of Oklahoma." Doctor of Education Dissertation, Oklahoma State University, Stillwater.

HEMBREE, Dan. "Teacher Perceptions of Supervised Occupational Experience Programs in Texas Vo-Ag Departments." Master of Science Thesis, Oklahoma State University, Stillwater.

KANE, Alioune. "Methods of Disseminating New Agricultural Techniques and Discoveries in the United States with Implications for Senegal."

LACRUZ, Pedro F. "Agricultural Extension Functions of a Venezuelan University Which May Enhance Agricultural Production and Quality of Life for Families of Small Farmers." Doctor of Education Dissertation, Oklahoma State University, Stillwater.

MEEK, Jim. "The Perceptions of the Vocational Agriculture Program as Seen By the Agriculture and Agriculture Related Businesses of the Stigler Area." Master of Science Report, Oklahoma State University, Stillwater.

PEREZ-OLIVARIES, Pastor A. "An Analysis and Evaluation of the Animal Science Component of the Curriculum in Vocational Agricultural Education in the Central-Western Region of Venezuela." Doctor of Education Dissertation, Oklahoma State University, Stillwater.

PIERCE, Gregory. "Short Term Training Needs of Full and Part Time Farm Workers in Oklahoma." Master of Science Thesis, Oklahoma State University, Stillwater.

PRITCHARD, Steven. "Establishment of a Multiple Teacher Program at McCloud High School." Master of Science Report, Oklahoma State University, Stillwater.

RAFIE, Ahmadreza. "Applicability of a Curriculum Model for High School Vocational Agriculture in Middle East Countries." Doctor of Education Dissertation, Oklahoma State University, Stillwater.

THOMPSON, Cynthia L. "Awareness of the General Public of Tulsa County Regarding Selected Aspects of the Vegetable Industry." Master of Science Thesis, Oklahoma State University, Stillwater.

STANFORD, Curtis. "Developing a Specialized Agriculture Mechanics Program at Shawnee High School." Master of Science Report, Oklahoma State University.

STERLING, Danny. "Attitudes of Agri-business Work Stations Toward Participation in the VAOT Program." Master of Science Report, Oklahoma State University, Stillwater.

VICK, Ronald. "4-H Leaders and Members Attitudes About the 4-H Program in Pittsburg County." Master of Science Report, Oklahoma State University, Stillwater.

WELLS, C.M. Danny. "The Importance of Leadership in the Central District Vo-Ag and FFA Programs." Master of Science Report, Oklahoma State University, Stillwater.

YORAMA, Moses. "The Study of What Can be Done to Make Dairy and Beef Production Attractive to the Youth of the Niger Delta Area of Nigeria." Doctor of Education Dissertation, Oklahoma State University, Stillwater.

PENNSYLVANIA

AURAND, Edwin L. "Identification of Competencies for the Agricultural Business and Ag Mechanics Curriculum at Juniata-Mifflin AVTS." Master of Education Paper, The Pennsylvania State University, University Park.

AYEWOH, Michael E. "Assessment of the Adequacy of the Professional Training Received by Senior and Junior Agricultural Extension Staff in Bendel State of Nigeria." Doctor of Philosophy Dissertation, The Pennsylvania State University, University Park.

BORAN, Karen. "Perceptions of the County Home Economist." Master of Science Thesis, The Pennsylvania State University, University Park.

COON, Terry. "Use of Newspapers to Teach Agriculture in the Elementary Grades." Master of Education Paper, The Pennsylvania State University, University Park.

CRAYS, Joyce. "Statewide Assessment of Sheep Producers Marketing and Agronomic Practices." Master of Education Paper, The Pennsylvania State University, University Park.

CURTIS, Samuel M., SCANLON, Dennis and BAGGETT, Connie. "Status of Special Needs Students in Pennsylvania." Staff Study, The Pennsylvania State University, University Park.

DAMRONGKIATTISAK, Wittaya. "Assessment of the Communication Role Performance of Sub-District Extension Agents in Thailand." Doctor of Philosophy Thesis, The Pennsylvania State University, University Park.

DECKER, Kenneth O. "Revision of The Pennsylvania FFA State Forestry Contest." Master of Science Thesis, The Pennsylvania State University, University Park.

EASTER, Glen W. "Professional Competencies Needed by Extension Agents in Swaziland." Doctor of Philosophy Dissertation, The Pennsylvania State University, University Park.

FERRY, Earl. "Effects of a Unit of Instruction in Energy Conservation in Changing Young Farmer Energy Conservation Practices and Understandings." Staff Study, The Pennsylvania State University, University Park.

GINTHER, Byron H. "Development and Evaluation of an Agents Guide for Developing New 4-H Leaders Training." Master of Science Thesis, The Pennsylvania State University, University Park.

GOODALE, Douglas. "Cost-Effectiveness Analysis of Two-Year Post Secondary Curricula: A Case Study." Doctor of Philosophy Dissertation, The Pennsylvania State University, University Park.

GRAY, Johnny. "Turkey Hunters' Attitudes Toward Safety Clothing." Doctor of Philosophy Dissertation, The Pennsylvania State University, University Park.

HARRIS, Renee. "Development of a Manual of Serious Games for Leadership Development of Youth." Master of Education Paper, The Pennsylvania State University, University Park.

HANSOHN, Anne and LINDLEY, William. "Evaluation of 4-H Club Experiences." Staff Study, The Pennsylvania State Univeristy, Univeristy Park.

HENRY, Arba L. "Evaluation of the Leadership and Programs of the Pennsylvania State Grange." Doctor of Education Thesis, The Pennsylvania State University, University Park.

LINDLEY, William and YODER, Edgar. "An Impact Evaluation of Selected Cooperative Extension Service and Vocational Education Youth Programs." Staff study, The Pennsylvania State University, University Park.

MCCOY, James S. "Evaluation of the College of Agriculture Curriculum." Doctor of Philosophy Dissertation, The Pennsylvania State University, University Park.

MILLER, Stephen. "Development of a Monthly Program Planning Handbook for Beginning Teachers." Master of Education Paper, The Pennsylvania State University, University Park.

MIZER, Jeff. "Development of an Approved Practices Manual for Vegetable Crops." Master of Agriculture Paper, The Pennsylvania State University, University Park.

MONYON, Raymond H. and YODER, Edgar P. "The Multiple-Criteria Approach for Cost Effectiveness Analysis of Vocational Education." Staff Study, The Pennsylvania State University, University Park.

MORTENSEN, James, STINSON, Richard and CURTIS, Samuel. "Competency Based Agricultural Education Programs in Secondary Schools." Staff Study, The Pennsylvania State University, University Park.

MYERS, Clyde A. B. "Skills Needed by Novice Pennsylvania Shepherds and an Evaluation of Available Sheep Publications." Master of Education Paper, The Pennsylvania State University, University Park.

ONG'ONDO, Wycliffe N. "Professional Competencies Needed by Extension Agents in Kenya." Doctor of Philosophy Thesis, The Pennsylvania State University, University Park.

REDDING, Larry R. "Perceived Effectiveness of FFA Chapters by Personnel Outside of the Vocational Agriculture Profession." Master of Science Thesis, The Pennsylvania State University, University Park.

SHAEFFER, Cynthia. "Evaluation of Microcomputer Programs for Dairy Rations." Master of Science Thesis, The Pennsylvania State University, University Park.

SHARKEY, David. "Development and Validation of Task Sheets for Use in Teaching Garden Center and Nursery Skills." Master of Education Paper, The Pennsylvania State University, University Park.

SHORT, Elizabeth. "Evaluation of a Foliage Slide Series and Student Manual." Master of Science Thesis, The Pennsylvania State University, University Park.

SHOTWELL, Richard T. "Producers' Attitudes Toward Direct Marketing of Their Fruits and Vegetables in Centre County Pennsylvania." Master of Agriculture Paper, The Pennsylvania State University, University Park.

STEVENS, Keith F. "Evaluation of the Cooperative Extension Service Extension Minutes Program." Master of Education Thesis, The Pennsylvania State University, University Park.

TUCKER, Terry W. "Development of a Manual for Use by Adult Farmer Teachers to aid with Interpretation of Farm Business Analysis Reports." Master of Education Paper, The Pennsylvania State University, University Park.

WICKRAMASURIYA, Heshan. "Development of a Manual for the Training of Rural Development Leaders in Sri Lanka." Master of Education Paper, The Pennsylvania State University, University Park.

WILLIAMS, William. "Effectiveness of Teaching Methods and Instructional Materials in Hunter Education." Staff Study, The Pennsylvania State University, University Park.

WONGSAMUN, Chaichern. "Analysis of Selected Factors Affecting the Success of Community 4-H Clubs in Pennsylvania." Doctor of Philosophy Dissertation, The Pennsylvania State University, University Park.

YODER, Edgar P. and MORTON, Raymond. "Cost Benefit/Effectiveness Evalaution of Vocational Agriculture Programs." Staff Study, The Pennsylvania State University, University Park.

TEXAS

MCBREEN, Edna and Curry, Thomas L. "Preparation of Agricultural Educators for Careers in Diverse Settings." Staff Study, Texas A&M University, College Station.

MOSS, Jeffrey W. "Vocational Education for the Handicapped: A Curriculum Development Project." Texas Education Agency Funded Project, Texas A&M University, College Station.

VIRGINIA

CRUNKILTON, John R., Miller, Larry E., and Lee, Jasper S. "Image of Agricultural Education at the University Level." Triad Staff Study at Virginia Polytechnic Institute and State University, The Ohio State University and Mississippi State University.

HILLISON, John H., Cunningham, Daisy, and Horne, Ralph. "A Determination of Vocational Education Teacher Concerns for the Implementation of Competency Based Education." Virginia Polytechnic Institute and State University, Blacksburg.

HILLISON, John H. "A Comparison of Officers and Advisors Perceptions of Agricultural Education Student Organizations." Staff Study, Virginia Polytechnic Institute and State University, Blacksburg.

McMILLION, Marcin B. "Farm Business Management and Energy Conservation Adult Program." Staff Study, Virginia Polytechnic Institute and State University, Blacksburg.

WEST VIRGINIA

PENNETT, John. "How the West Virginia Vocational Agriculture Teacher Uses His/Her Time." Master of Science Thesis, West Virginia University, Morgantown.

BOGGESS, Janet Knight. "A Study of the Problems Encountered in Teaching Vocational Agriculture by Women Vocational Agriculture Teachers in The United States." Master of Science Thesis, West Virginia University, Morgantown.

CHALAMIRA, Lucas, "Percieved Problems in Agriculture Most in Need of Research Solutions as Perceived by West Virginia Vocational Agriculture Teachers and County Extension Agents." Master of Science Thesis, West Virginia University, Morgantown.

DLAMINI, Ruth. "The Work of Coordinators in the Instruction of Agriculture in Swaziland Schools as Perceived by Coordinators, Principals and Teachers." Master of Science Thesis, West Virginia University, Morgantown.

HANNA, Michael Woody. "The Need for Livestock Production and Management Workshops as Perceived by West Virginia Vocational Agriculture Teachers and County Agricultural Extension Agents." Master of Science Thesis, West Virginia University, Morgantown.

HASLACKER, Arlyn. "A Study to Determine the Strengths and Weaknesses of the West Virginia Vocational Agriculture Record Book." Master of Science Thesis, West Virginia University, Morgantown.

KISNER, Harry S. "Determining the Level of Importance of Criteria Used to Select State Farmers by West Virginia Association, Future Farmers of America." Master of Science Thesis, West Virginia University, Morgantown.

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SULIMAN, Abdalla A. "The Perceptions of Wisconsin Agricultural Extension Agents Toward the Educational Telephone Network (ETN)/The Statewide Extension Education (SEEN)/The Prepared Telephone Programs as a Teaching Tool." Master of Science Thesis, University of Wisconsin, River Falls.

WILSON, Linda C. "A Profile of Female Agricultural Teachers and Their Job Satisfaction Level." (A National Study). University of Wisconsin, River Falls.

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TABLE I

LOCATION OF PREVIOUS REGIONAL SUMMARIES OF STUDIES IN AGRICULTURAL EDUCATION ON MICROFICHE IN THE ERIC SYSTEM

1968 - 1974*

Year	Regions			
	Central	North Atlantic	Pacific	Southern
1968-1969	ED 036 642		ED 036 635	ED 038 543
1969-1970	ED 047 107	ED 047 108	ED 147 110	ED 047 109
1970-197[illegible]	ED 057 252	ED 061 415	ED 061 447	ED 061 446
1971-1972	ED 076 800	ED 107 904	ED 078 164	ED 079 472
1972-1973	ED 103 694	ED 107 903	ED 109 376 (1972-1974)	ED 110 745
1973-1974	ED 110 660	ED 110 792		ED 110 746

*Documents with ED numbers may be found in any complete ERIC collection of ERIC microfiche or ordered from EDRS, P. O. Box 190, Arlington, Virginia 22210.

The Summaries of Research and Development Activities in Agricultural Education were compiled nationally for the first time in 1974-1975. Data pertaining to location of previously compiled national summaries may be found displayed in Table II.

TABLE II

LOCATION OF PREVIOUS NATIONAL SUMMARIES OF STUDIES IN AGRICULTURAL EDUCATION ON MICROFICHE IN THE ERIC SYSTEM

1974 - 1981*

Year	Microfiche Number
1974-1975	ED 114 635
1975-1976	ED 134 107
1976-1977	ED 151 532
1977-1978	ED 167 781
1978-1979	ED 187 894
1979-1980	ED 205 706
1980-1981	Number to be assigned

*Documents with ED numbers may be found in any complete ERIC collection of ERIC microfiche or ordered from EDRS, P. O. Box 190, Arlington, Virginia 22210.

PREVIOUS EDITORS

Summaries of Research and Development
Activities in Agricultural Education
United States of America

1974-1975 - Dr. J. David McCracken, The Ohio State University
1975-1976 - Dr. J. David McCracken, The Ohio State University
1976-1977 - Dr. Alfred J. Mannebach, The University of Connecticut
1977-1978 - Dr. Alfred J. Mannebach, The University of Connecticut
1978-1979 - Dr. Jimmy G. Cheek, The University of Florida
1979-1980 - Dr. Jimmy G. Cheek, The University of Florida
1980-1981 - Dr. Joe W. Kotrlik, Louisiana State University
1981-1982 - Dr. Joe W. Kotrlik, Louisiana State University